United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e. PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5 3	DC0000094 11	12 13/11/20 17	18 C	19 S	20 2

Remarks

21 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	B1	QA	Reserved
67 69	70 71	72	73	74 75 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Potomac Electric Power Company, Inc.
Benning Generating Station
3400 Benning Road, NE
Washington, DC 20019

Entry Time/Date	Permit Effective Date
9:30 AM November 20, 2013	06/19/2009
Exit Time/Date	**Permit Expiration Date**
1:00 PM November 20, 2013	06/18/2014

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

1. Fariba Mahvi, Lead Environmental Engineer (PEPCO Holdings, Inc), 202-331-6641
2. Heather Brinkerhoff, HB Consulting, LLC 202-330-7431
3. Mike Williams, Power Plant Asset Manager (PEPCO Energy Services), 202-388-2521.
4. Roger Williams, Environmental/Safety Manager (PEPCO Energy Services), 703-253-1782.
5. Steve Ortel Lab Manager, (PEPCO Holdings, Inc.)

Other Facility Data (e.g., ISC NAICS, and other descriptive information)

Name, Address of Responsible Official/Title/Phone and Fax Number

George Nelson, Vice President Operations and Engineering
701 Ninth Street, NW, Washington, DC 20068

Contacted
x Yes ____ No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

X Permit	X Self-Monitoring Program	____ Pretreatment	____ MS4
X Records/Reports	X Compliance Schedules	X Pollution Prevention	
X Facility Site Review	X Laboratory	X Storm Water	
X Effluent/Receiving Waters	X Operations & Maintenance	____ Combined Sewer Overflow	
X Flow Measurement	____ Sludge Handling/Disposal	____ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes **SEV Description**

A0023 Industrial Spill: A large quantity of oil was spilled in the basement of the facility on June 12, 2013. This spill bypassed the oil water separator and was discharged into the Anacostia River.

A0012 Numeric effluent violation: A total of 12 sampling events resulted in Numeric effluent violations. Each violation was reported to EPA.

A0011 Unapproved Bypass: The June 12, 2013 oil spill bypassed treatment and was discharged to the Anacostia River.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Adion Chinkuyu	District Department of the Environment /Water Quality Division/ 202-535-2193	November 20, 2013
David Pilat	District Department of the Environment /Water Quality Division/ 202-281-3963	November 20, 2013
Isaac Kelley	District Department of the Environment /Water Quality Division/ 202.535.2691	November 20, 2013
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date

Comments		

	PERMIT NO. DC0000094
SECTIONS F THRU L: COMPLETE ON ALL INSPECTIONS, AS APPROPRIATE. N/A = NOT APPLICABLE	

SECTION F - FACILITY AND PERMIT BACKGROUND

ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code) same	**DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE** August 19, 2012 by DDOE and EPA **FINDINGS**

SECTION G - RECORDS AND REPORTS

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. DETAILS:	X YES	____ NO	___ N/A (Further explanation attached ___X___)
(a) ADEQUATE RECORDS MAINTAINED OF:			
(i) SAMPLING DATE, TIME, EXACT LOCATION	X YES	_ NO	_ N/A
(ii) ANALYSES DATES, TIMES	X YES	_ NO	_ N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	X YES	_ NO	_ N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED	X YES	_ NO	_ N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)	X YES	_ NO	_ N/A
(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g., continuous monitoring instrumentation, calibration and maintenance records).	X YES	_ NO	_ N/A
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.	X YES	_ NO	_ N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING LOGS FOR EACH TREATMENT UNIT.	X YES	_ NO	_ N/A
(e) QUALITY ASSURANCE RECORDS KEPT.	X YES	_ NO	_ N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS.	_ YES	_ NO	X N/A

SECTION H - PERMIT VERIFICATION

INSPECTION OBSERVATIONS VERIFY THE PERMIT. DETAILS:	X YES	____ NO	____ N/A (Further explanation attached ____X____)
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.	X YES	_ NO	_ N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT. **Facility has begun decommissioning**	_ YES	X NO	_ N/A
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION. **Facility no longer produces products**	_ YES	X NO	_ N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION.	X YES	_ NO	_ N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES	X YES	_ NO	_ N/A
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED. **Facility no longer uses raw water**	_ YES	X NO	_ N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT.	_YES	X NO	_ N/A
(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS.	X YES	_ NO	_ N/A

(i) ALL DISCHARGES ARE PERMITTED.	X YES _ NO _ N/A
Comments:	

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SECTION I - OPERATION AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. DETAILS:.	X YES ____ NO ____ N/A (Further explanation attached _____)
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED.	X YES _ NO _ N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	X YES _ NO _ N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT.	_ YES _ NO X N/A
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED. **Once per year by Clean Ventures, Inc.**	X YES _ NO _ N/A
(e) ALL TREATMENT UNITS IN SERVICE.	X YES _ NO _ N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS. **Mostly in-house staff, and AMEC**	X YES _ NO _ N/A
(g) QUALIFIED OPERATING STAFF PROVIDED.	X YES _ NO _ N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS. **Training manual, on-job training**	X YES _ NO _ N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS.	X YES _ NO _ N/A
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT.	X YES _ NO _ N/A
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED. **SOPs for preventive maintenance (e.g. O/W separator)**	X YES _ NO _ N/A
(l) SPCC PLAN AVAILABLE. **Integrated Contingency Plan (ICP) revised 2010, SWPP revised 2012**	X YES _ NO _ N/A
(m) REGULATORY AGENCY NOTIFIED OF BY-PASSING. (Dates June 2013)	X YES _ NO _ N/A
(n) ANY BY-PASSING SINCE LAST INSPECTION. June 2013	X YES _ NO _ N/A
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED.	_ YES X NO _ N/A

SECTION J - COMPLIANCE SCHEDULES

PERMITTEE IS MEETING COMPLIANCE SCHEDULE. X YES ____ NO ____ N/A (Further explanation attached X)

CHECK APPROPRIATE PHASE(S): TMDL Implementation Plan

x (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.

x (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).

x (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.

x (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.

x (e) CONSTRUCTION HAS COMMENCED.

x (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.

x (g) CONSTRUCTION HAS BEEN COMPLETED.

____ (h) START-UP HAS COMMENCED.

____ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

Comments:

1. Manhole K/Outfall 101 has been completed and is sampled during qualifying storm events.
2. TMDL implementation plan is in progress, stormwater filter boxes and metal booms have been installed, oil booms have been installed around storm water inlets, scrap metal has been removed from the sites, cracks have been repaired, and parking over manhole inlets is no longer permitted. The final phase of the implementation plan requires the installation of Low Impact Developments (LIDs) - this will be accomplished following the completion of plant decommissioning.

	PERMIT NO. DC0000094
SECTION K - SELF-MONITORING PROGRAM	
PART 1 - FLOW MEASUREMENT (Further explanation attached ____X____) PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. DETAILS:	_X_ YES __ NO __ N/A
(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED.	_X_ YES __ NO __ N/A
TYPE OF DEVICE __ WEIR _PARSHALL FLUME _MAGMETER _VENTURI METER _X_ OTHER (Specify **Totalizer (~water meter) @ Outfall 003. Outfall 201 utilizes hourly totalizers and pump curves to calculate total flow.**	
(b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration **Outfalls 003 & 201 meters do not need calibration.**	___YES __ NO _X_ N/A
(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED.	_X_ YES __ NO __ N/A
(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED.	__ YES __ NO _X_ N/A
(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES.	_X_ YES __ NO __ N/A
PART 2 - SAMPLING (Further explanation attached ____X____) PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. DETAILS: **Pepco & PES collect all samples & analyze pH on site. Samples for other permitted analytes are sent to a contract laboratory (Microbac Laboratories Inc. or Cape Fear)**	_X_ YES __ NO __ N/A
(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	_X_ YES __ NO __ N/A
(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT.	_X_ YES __ NO __ N/A
(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT. IF NO, _x_ GRAB _x_ MANUAL COMPOSITE **(Manhole K)** ___ AUTOMATIC COMPOSITE ___ FREQUENCY	_X_ YES __ NO __ N/A
(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE.	_X_ YES __ NO __ N/A
(i) SAMPLES REFRIGERATED DURING COMPOSITING	__YES __ NO _X_ N/A
(ii) PROPER PRESERVATION TECHNIQUES USED	_X_ YES __ NO __ N/A
(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT	_YES __ NO _X_ N/A
(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3	_X_ YES __ NO __ N/A
(e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT.	_X_ YES __ NO __ N/A
(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT.	_X_ YES __ NO __ N/A
PART 3 - LABORATORY (Further explanation attached ____X____) PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT. DETAILS: **Contract Lab was not visited during subject CEI.**	_X_ YES __ NO __ N/A
(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3)	_X_ YES __ NO __ N/A
(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED.	__ YES __ NO _X_ N/A
(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED.	__ YES _X_ NO __ N/A
(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.	_X_ YES __ NO __ N/A
(e) QUALITY CONTROL PROCEDURES USED. **By Contract Lab**	_X_ YES __ NO __ N/A
(f) DUPLICATE SAMPLES ARE ANALYZED **10%** OF TIME.	_X_ YES __ NO __ N/A
(g) SPIKED SAMPLES ARE USED **10 %** OF TIME.	_X_ YES __ NO __ N/A
(h) COMMERCIAL LABORATORY USED. **O&G, TSS, Metals, PCBs**	_X_ YES __ NO __ N/A
(i) COMMERCIAL LABORATORY STATE CERTIFIED.	_X_ YES __ NO __ N/A
LAB NAME: (1) **Microbac Laboratories, Inc.** (Lab picks up samples at PEPCO site)./ (2) **Cape Fear Analytical, LLC** LAB ADDRESS: **Baltimore Division, 2101 Van Deman Street, Baltimore, MD 21224. Tel. 410-633-1800/6553 / 3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405**	
Comments: 1. Spiked samples are used all year instead of every 6 months, 10% of samples are spiked. 2. Both the on-site and contract laboratories passed the DMR-QA Study #32 that is required by EPA.	

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SECTION L - EFFLUENT/RECEIVING WATER OBSERVATIONS (Further explanation attached ____X____)

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOLIDS	COLOR	OTHER
101[1]	–	–	–	–	–	–	No Flow
013[2]	No	No	No	No	No	Clear	
202 & 203[3]	–	–	–	–	–	–	No Flow
201 & 003[4]	–	–	–	–	–	–	No flow

1. Outfall 101 – there was no discharge. Outfall is influenced by tides.
2. Outfall 013 – there was discharge at the time of inspection. The discharge was clear in appearance.
3. Outfalls 202 and 203 – these outfalls have been closed.
4. Outfalls 201 & 003 - No discharge flows at 201 and 003 (Oil/Water Separator outfalls) as no treatment was going on.

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - SAMPLING INSPECTION PROCEDURES AND OBSERVATIONS (Further explanation attached _____) No samples were taken.

__ GRAB SAMPLES OBTAINED

__ COMPOSITE OBTAINED

__ FLOW PROPORTIONED SAMPLE

__ AUTOMATIC SAMPLER USED

__ SAMPLE SPLIT WITH PERMITTEE

__ CHAIN OF CUSTODY EMPLOYED

__ SAMPLE OBTAINED FROM FACILITY=S SAMPLING DEVICE

COMPOSITING FREQUENCY _____ PRESERVATION _____.

SAMPLE REFRIGERATED DURING COMPOSITING: __ YES __ NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE

SECTION N - ANALYTICAL RESULTS (Attach report if necessary) N/A

Inspection Narrative

Water Compliance Evaluation Inspection
Potomac Electric Power Company, Inc.
Benning Road Generating Station
3400 Benning Road, NE
Washington, DC 20019

NPDES Permit No. DC0000094

Inspection Date: November 20, 2013

DDOE Inspectors: Adion Chinkuyu, P.E., Environmental Engineer

David Pilat, Environmental Protection Specialist

Isaac Kelley, Environmental Protection Specialist

PEPCO Representatives:

1. Fariba Mahvi, Lead Environmental Engineer (PEPCO Holdings, Inc),
2. Heather Brinkerhoff, HB Consulting, LLC,
3. Mike Williams, Power Plant Asset Manager (PEPCO Energy Services),
4. Roger Williams, Environmental/Safety Manager (PEPCO Energy Services),
5. Steve Ortel Lab Manager, (PEPCO Holdings, Inc.), and

1. Introduction

On November 20, 2013, the Water Quality Division (WQD) of the District Department of the Environment (DDOE) conducted a National Discharge Elimination System (NPDES) Water Compliance Evaluation Inspection (CEI) at the Potomac Electric Power Company, Inc. (PEPCO), Benning Road Generating Station, located at 3400 Benning Road, NE, Washington, D.C. 20019 (or the facility). WQD inspectors, Adion Chinkuyu, Isaac Kelley, and David Pilat reviewed records, interviewed personnel, conducted an inspection tour of the facility, photo documented the current state of the facility **(Attachment 1)**, and completed an EPA Form 3560-3, Water Compliance Inspection Report **(Attachment 2)**.

The following facility representatives participated in the inspection: Fariba Mahvi, Lead Environmental Engineer (PEPCO Holdings, Inc); Heather Brinkerhoff, HB Consulting; Roger Williams, Environmental/Safety Manager (PEPCO Energy Services); Mike Williams, Power Plant Asset Manager, (PEPCO Energy Services, Inc.); and Steve Ortel, Lab Manager, (PEPCO Holdings, Inc.). The inspectors presented their credentials to facility personnel upon entry of the facility.

The weather was sunny and dry with temperature of about 49°F.

2. Facility Background

PEPCO, which is referred to in NPDES Permit No. DC0000094 as "Benning Generating Station" is located on approximately 77 acres of land, and contributes stormwater and process water to the discharges authorized by the Permit. The facility consists of a generating station, a 230 kV switchyard, a 69 kV switchyard, fleet services, office and security services, transmission and distribution shops, transformer repair and testing shops, storage buildings, several parking areas, a hazardous waste/PCB handling storage facility, hazardous waste accumulation trailer, asbestos trailer, subsidiary and contractor facilities, and various outdoor storage areas (**Figure 1**). The generating station is owned by Potomac Power Resources (PPR) [a wholly owned subsidiary of PEPCO Energy Services (PES)].

In 2011, PEPCO transitioned from North American Energy Services (NAES) to PES for operation and maintenance of the Benning Road Generating Station. Prior to closure and decommissioning activities, the generating station was comprised of two fuel oil based steam generators, each with a rated output of 275 megawatts (used mainly during peak winter and summer seasons when electricity demand is high). There were also two fuel oil based package boilers for auxiliary and building services. The generation station used No. 2 fuel oil for start-up, and then switched to No. 4 fuel oil for sustained operation. Approximately 4.2 million gallons of fuel was stored on-site. When running at full capacity the plant used 600 gallons of No. 4 fuel oil per minute. The facility representatives indicated that the facility maintains a Spill Prevention, Control, and Countermeasure (SPCC) plan because of the large quantities of chemicals and oil stored at the site.

3. Facility Closure Plans

As of June 1 2012, power generating operations at PEPCO plant ceased and plant decommissioning commenced based on the facility's decommissioning plan (**Attachments 3 and 4, Photos #1a, 1b, and 1c**). PEPCO has a detailed plant closure plan; this plan was not reviewed at the time of the inspection. It is estimated that plant closure will be completed by the fall of 2014. The general objectives and estimated dates of completion of each phase are as follows:

- Phase 1: Dismantling of the cooling towers, September 2013 – December 2013 (still in progress at the time of inspection)
- Phase 2: Demolition of the Benning Power Plant buildings and equipment, November 2013 – fall 2014
- Phase 3: Implosion of the Benning Power Plant, Summer/fall 2014
- Phase 4: Restoration, Summer/fall 2014

Facility representatives stated that the closure will be done in accordance with all environmental regulatory requirements established by the District of Columbia and federal agencies. The closure activities are currently running on schedule. Outfalls 202 and 203 have been closed, both oil houses and the tank farm area have been closed and removed, onsite transformers associated with the generation station have been removed, and they are in the process of dismantling the cooling towers and removing the remaining equipment within the power plant.

PEPCO's NPDES Permit (DC0000094) was issued on June 19, 2009 and will expire on June 18, 2014. The permit authorizes discharge of both process water (cooling water blow down and cooling tower basin wash water) and storm water runoff. Each of these waste streams is described in the permit. Following plant shutdown, process water is no longer produced, but stormwater has continued to be accumulate and discharged. The current stormwater infrastructure will be left in place. Based on the re-grading going on at the site, there may be some changes (additions) to the stormwater infrastructure and monitoring points.

In order to comply with District of Columbia and federal government stormwater regulations the current NPDES Permit and associated compliance monitoring programs will be continued and maintained until the expiration of the permit. The plant personnel stated, all facility controlled river water inlets have been plugged, and the plant will discontinue the use of the sanitary sewer system. The main river water intake structure, which is regulated by the United States Army Corps of Engineers, will be abandoned in place.

In January 2011, PEPCO and DDOE entered into a Consent Decree, which requires PEPCO to conduct a Remedial Investigation and Feasibility Study (RI/FS) of environmental conditions of the PEPCO facility and the adjacent areas of the Anacostia River. The Consent Decree was finalized on December 1, 2011. PEPCO has stated that plant closure and decommissioning

procedures will not interfere with the consent decree compliance. Assessment work in the Anacostia River and on PEPCO's property has commenced and is ongoing.

4. Records and Reports

Discharge Monitoring Reports (DMRs), the facility's Stormwater Pollution Prevention Plan (SWPPP), Spill Prevention, Control, and Countermeasure plan (SPCC), and monthly stormwater self inspection reports were reviewed as part of the inspection. Specifically, DMRs from July 2012 to October 2013 were reviewed along with all the supporting lab analysis and flow data used to generate the reports. The DMR and supporting data appeared to be adequate. A cursory review for completeness and accuracy identified no discrepancies. It was noted that for the period reviewed, 20 permit excursions were documented. The excursions are listed below in Table 1.

Table 1: Permit Excursions between the FY 2012 and FY 2014 CEI

Excursion Date	Excursion Location	Analyte						
		TSS	Copper	Lead	Iron	Zinc	O&G*	pH
September 6, 2012	Outfall 013		X		X	X		
October, 28, 2012	Outfall 101/Manhole K							X
November, 13 2012	Outfall 013		X		X	X		
January, 16 2013	Outfall 013		X			X		
June, 11 2013	Outfall 013						X	
June, 6 2013	Outfall 013		X		X	X		
September 12, 2013	Outfall 013		X			X		
October 7, 2013	Outfall 013	X	X	X	X	X		

*Oil and Grease: This is based off of visual observation reported by Pepco of 10 gallons of oil being discharged out of Outfall 013 to the Anacostia River.

The facility representatives indicated that the facility is in the process of revising its SWPPP and SPCC plans to reflect changes made to the facility during plant closure. The inspectors reviewed the 2012 SWPPP and found the plan to be updated to include the suggestions made by PEPCO's environmental consultants (AMEC) 2011 annual report of the TMDL implementation plans and the PCB and Iron Source Tracking and Pollution Minimization Plan. The facility's SWPPP is combined with the SPCC plan into one document called Integrated Contingency Plan (ICP), which is updated annually. The ICP will be revised following shutdown and removal of all fuel from the facility. The inspectors reviewed 2012 ICP as part of this inspection, which had been signed by the responsible corporate official.

The facility maintains two in-house (onsite) laboratories. The first is located at the power generation station. This laboratory is no longer in use, but was previously used to monitor (measure) effluent samples for parameters such as residual chlorine and pH. The second is the Chemical Lab located at the Chemical Building. This lab collects the samples and analyzes the PEPCO samples from the oil-water separators for pH.

Samples collected for other analyses are picked up the same day or the following day by couriers and transferred to Microbac Laboratories, Inc. (Microbac) in Baltimore for oil and grease (O&G), total suspended solids (TSS), PCB Aroclor, and metals analysis or to Cape Fear Analytical, LLC (Cape Fear) in North Carolina for PCB congener analysis. A review of the chemical lab's calibration log books indicated the use of a 3-point procedure to calibrate its pH meters every month. The pH buffer solutions used in the calibration were all current at the time of this inspection (**Photo #2**). The in-house lab for the power generating side was not observed at the time of inspection.

5. Permit Verification

PEPCO's NPDES Permit (DC0000094) was issued to the facility on June 19, 2009 and will expire on June 18, 2014. Due to plant closure and decommissioning, the facility is no longer as described in the permit. The permit has monitoring and effluent limit requirements at its outfalls or monitoring points. All known discharges from the facility are permitted.

6. Operation and Maintenance

(a) Wastewater

The facility has two oil-water separator treatment systems:

(i) Oil-water separation/settling system at Outfall 201was designed to remove oil and grease from utility wastewater and a No. 2 fuel oil loading area. Monitoring point 201 is the discharge point from this oil-water separator. In 2011, the facility installed a new oil-water separator system, which is currently operational and in-service (**Photo #3**.)

(ii) Oil-water separation/settling/filtration system at Outfall 003 is a treatment system designed to remove oil, grease and solids from water that is removed from utility manholes throughout PEPCO's service area. The treatment system operates in batch mode and consists of an oil-water separator, storage, and settling tanks followed by a two staged filter system of cloth and charcoal media (**Photos #4, 5a and 5b**). The treated effluent is held in an underground tank from where it is pumped as a batch through Outfall 003 to the Outfall 013 pipeline. If necessary, pH is adjusted before discharging. At the time of the inspection, the treatment system was not discharging to Outfall 003. The facility representatives stated that the two on-site oil-water separators will not be removed as part of the plant closure procedures.

(b) Stormwater

Storm water runoff from the facility is conveyed through a drainage system and is discharged to the Anacostia River and the Districts Municipal Separate Stormwater System (MS4) at various outfalls. Most of the stormwater runoff from the PEPCO's service center area is conveyed

through a 36-inch and 54-inch storm drainpipe to the Anacostia River via Outfall 013 (**Photo #6.**)The monitoring/sampling location for Outfall 013 is located near the property boundary within the PES power plant area and roughly 500 ft from its actual discharge point (end of 54" outfall pipe). Stormwater catch basins within the demolition area have been covered with filter cloth, oil absorbent booms, and rip-rap to remove excess debris generated during demolition from entering the basin **(Photo #7)**.

The NPDES Permit (DC0000094) also authorizes the facility to discharge stormwater from Outfall 101 whose drainage area includes the transformer area on the west side of the power generating building (power plant). Manhole K, the original monitoring/sampling location for Outfall 101, has been eliminated because tidal problems from the river often made representative sampling difficult. In accordance with the reissued permit's compliance schedule, the facility has developed an alternative to sample collection at the Manhole K location, which consists of compositing grab samples from 7 upstream storm drains on the west side of the power plant that discharge to Manhole K **(Photo #8).**

The facility has housekeeping procedures and best management practices (BMPs) in place to prevent or minimize the release of pollutants to the environment. These BMPs include: adequate dikes and secondary containment, spill containment and clean-up kits, oil absorbent booms and filter cloth at inlets and drains, Low Impact Developments (LIDs), monthly stormwater inspections, and a metal removal and management program **(Photos #9.)**

The facility representatives stated that stormwater monthly inspections are conducted by PES staff for the generating station (power plant) area and PEPCO staff for the remainder of the facility site. Both PEPCO and PES use the same reporting format, which is in the form of a checklist. The forms are signed by their respective inspectors, reviewed and initialed by their managers. The PEPCO and PES reports currently appear to meet the intent of EPA's Permit.

7. Compliance Schedules

Part VII. Special Conditions H. Manhole K. of the permit required the facility to submit for comment to EPA and DDOE, a plan (with an implementation schedule) to retrofit Manhole K into a reliable monitoring point for storm water discharging from Outfall 101. The goal was to ensure that the manhole is not affected by high tides. According to the facility representatives, Manhole K sampling consists of compositing grab samples from 7 upstream storm drains on the west side of the power plant that discharge to Manhole K **(Photo # 10.)** Sampling pans are inserted in each drain to collect the grab samples which are then composited. PEPCO has contracted AMEC, their environmental consulting engineers, to conduct the sampling. This sampling procedure has been implemented and is a part of PEPCO's routine self-monitoring program.

Part VII. Special Conditions Section A. Conditions Applicable to PCB Sampling and Limits condition #4 of the permit requires that, upon detection of PCB analyzed by method 1668B at or

above the detectable level, the facility must submit to EPA and DDOE a plan to determine the source or sources of the PCB discharge and a pollutant minimization plan. In addition, Part VII Special Condition Section D Iron of the permit requires the facility to conduct a study to determine the source or sources of iron and within 3 years of the permit issuance develop and install BMPs at appropriate locations to reduce the release of total iron to 1.0 mg/l. In compliance with these requirements PEPCO contracted AMEC to conduct the appropriate studies and development the plan to meet the permit criteria. In 2011, AMEC submitted to PEPCO a PCB and Iron Source Tracking and Pollutant Minimization Plan. This plan is included in PEPCO's SWPPP. In accordance with AMEC's findings and recommendations, PEPCO completed the implementation of a total suspended solids removal system by installing a solids and metal reducing filtering system in each of their on-site stormwater drains. In addition, the facility has implemented a metal removal and management program that incorporates regular monthly inspections to remove or cover all exposed metal on the yard.

Part VII. Special Condition Section E. TMDL Implementation Plan of the permit requires the facility to submit a plan to EPA and DDOE describing all previous, on-going, and future efforts by the permittee to meet pollutant reduction loads required by the Anacostia River TMDL. In compliance with this permit condition PEPCO contracted AMEC to complete the TMDL Implementation Plan. In 2011 AMEC submitted to PEPCO a TMDL Implementation Plan. This plan is also included in PEPCO's SWPPP and incorporates the PCB and Iron source Tracking and Pollutant Minimization Plan. AMEC's implementation plan employed a three Phase approach to reduce the concentration of contaminants in their discharge to within limits set forth in the TMDL. Phase I and Phase II have been completed and consisted of the installation of the stormwater inlet filters and implementation of metal removal and management program, respectively. Phase III requires the implementation of LIDs. PEPCO has installed some of the planned LIDs, but will not complete the installation of all LIDs until the completion of planned onsite demolition.

8. Self Monitoring Program

The facility has a self monitoring program. The flow measuring device (in-line totalizer water-type flow meter) at Outfall 003 (**Photo #11**) appeared to be working properly at the time of the inspection and according to facility representatives, does not need calibration. Outfall 201's flow is estimated by metering running times (hours) of the oil-water separator's 2 influent pumps and applying their pump ratings (**Photo #12.**)

The overall flow from Outfall 013 is estimated from the summation of the process water, wastewater flow at the outfalls and stormwater runoff calculated using rainfall data and runoff coefficients for the various sections of the facility. This approach appears to be consistent with Part I B. Effluent Limitations and Monitoring Requirements- Storm Water Discharges of the permit.

The facility representatives indicated that, based on the recommendations of the 2008 compliance inspection, they continue to directly sample for oil and grease using a glass bottle inserted in a plastic sample holder, which is tied to a stainless steel rod. Residual chlorine and pH samples are collected and analyzed within 15 minutes and documented in their respective lab's log books. Sample temperatures are also documented on chain of custody forms (**Photo #13.**) PES's monthly stormwater inspection records are essentially the same as PEPCO's. The facility's self monitoring program seemed to be in compliance with the permit requirements.

9. Laboratory

As noted above, the facility includes two on-site laboratories and contracts two off-site laboratories. Until last year the facility operated both onsite laboratories, but due to the plant closure the PES lab previously located in the power plant is no longer in service. PES personnel maintain a small storage area in the power plant building where they store and calibrate their pH probe and chlorine testing kit and maintain a refrigerator for temporary sample storage.

- PES personnel use the small PES storage area to analyze the facility's NPDES permit effluent samples for residual chlorine and pH. They also collect TSS, Oil & Grease, PCB, and Metals samples which they preserve, as necessary, and refrigerate before shipment to Microbac or Cape Fear. PES personnel monitor Outfalls 013 and 201. As noted earlier, PEPCO has contracted AMEC to monitor Outfall 101 (Manhole K) during storm events. The pH buffer solutions used in the calibration were expired at the time of this inspection **(Photo# 14)**; calibration records were up to date **(Photo #15.)**

- The PEPCO lab, located on the eastern side of the site where PEPCO's electrical services (shops, etc.) are based, serves PEPCO's electric utility operations and supports the PEPCO and PES personnel's self-monitoring obligations regarding the facility's NPDES permit. Specifically, samples are collected from Outfall 003 and analyzed for pH. Samples are also collected for analysis of TSS, Oil & Grease, and PCB and are prepared for pickup and analysis by Microbac or Cape Fear. The samples are kept in a refrigerator until they are picked up by the lab or its currier **(Photo #16).**

The PEPCO lab and PES meters calibration log books indicated that each lab uses the 3-point procedure to calibrate their respective pH meters for each of the monthly samples. Also, their respective pH buffer solutions (4, 7, and 10) used in their calibrations were all current (unexpired) at the time of this inspection.

As previously stated, the facility contracts analytical services to two off-site laboratories. Microbac and Cape Fear. Microbac analyzes the facility's samples for TSS, oil & grease, and metals. Cape Fear analyzes the facilities samples for PCB congeners. Microbac lab conducts Quality Control duplicate sample analysis and internal spike analysis on every tenth sample received. Microbac was not included as part of the subject inspection. Only Microbac and PEPCO's labs participate in the EPA's DMR QA Studies and both passed last year's study.

10. Effluent and Receiving Waters

The facility's permitted discharges consist of the following: non-contact cooling water, cooling tower blow down, treated wastewater (by oil/water separator, settling, and filters) effluent, cooling tower basin wash water, cooling water from boiler feed pumps, demineralization, regeneration wastes, groundwater infiltration sump water, fireside washing, miscellaneous cleaning waste, water for hydrostatic tank testing, and stormwater. A majority of these flows are discharged to the Anacostia River (through wetlands) via Outfall 013 (**Photos #6 and 17.**) Due to plant closure and decommissioning, no process water was being produced during the CEI. PES staff samples and conducts self-monitoring activities at Outfalls 101, 201 and 013 while PEPCO staff samples Outfall 003. Effluent samples for Outfall 013 are collected at a manhole roughly five hundred feet upgradient from the end of the discharge pipe. Samples for Outfalls 003 and 201 (oil-water separators) are collected at the end of their respective treatment system's discharge pipe before entering Outfall 013. Before the plant closure and decommissioning samples for Outfalls 202 and 203 were collected by PES staff from the cooling tower sumps.

The following outfalls are listed in the Permit. Several of these outfalls are internal and are found within the extents of the facility. Additionally, several of these outfalls have monitoring requirements and effluent limits.

Outfall	Description	Monitoring	Effluent Limits
003[1]	Internal, oil-water separator	X	X
013[2]	Discharges to Anacostia River	X	X
101[3]	Stormwater, Discharges to Anacostia River	X	
201[4]	Internal, wastewater from oil-water separator, reverse osmosis regenerate, boiler blow down	X	X
202[5]	Internal, cooling tower blow down	X	X
203[5]	Internal, cooling tower blow down	X	X

Notes:

1. Monitoring point 003 is the discharge point from a treatment system designed to remove oil, grease and solids from water removed from utility manholes and transported to the facility. The treatment system operates in batch mode and consists of an oil-water separator, settling tank followed by a two staged filter system of cloth and charcoal media. (**Photos #4, 5a, and 5b**).
2. Monitoring point 013 has two sets of monitoring requirements and effluent limits. These requirements vary depending on whether or not there is a discharge of cooling tower blow down. See Part I.B and Part VII of the permit.
3. Monitoring point 101 is manhole K for monitoring stormwater from the transformer area on the west side of the power plant. As required by the permit, the facility has modified

their sampling method due to tidal interference within Manhole K as noted above (See **Section 7: Compliance Schedules**). The outfall discharges to the Anacostia River across Benning Road.

4. Monitoring point 201 is the discharge point for the treated wastewater flowing from the new oil-water separator which was put in service on 3/31/11.
5. Monitoring points 202 and 203 have two sets of monitoring requirements and effluent limits. These requirements vary depending on whether or not there is a discharge of cooling tower blow down (Part I.D.) or cooling tower wash water (Part I.E). According to Ms. Brinkerhoff (HB Consulting), only the cooling tower blow down is discharged to the river.
6. Due to plant closure, process effluent will no longer be produced and Outfalls 202 and 203 are no longer sampled.

(a) Outfall 003

Outfall 003 is an internal outfall that discharges batch flow (pumped) from the treated water holding tank to the manhole of the 48" section of the main pipeline, which ultimately becomes the 54" main pipeline discharging as Outfall 013. Outfall 003's discharge is measured by an in-line (totalizer) flow meter in the effluent discharge line (**Photo #11***)* and sampled from the underground effluent holding tank during discharge. The outfall was not discharging at the time of inspection. The treatment system (oil/water separator/settling tank/filters) was operable but not in operation at the time of inspection.

(b) Outfall 201

Outfall 201 is a major internal monitoring and discharge point for the facility's industrial wastewater and some stormwater. A duplex pump system (each rated at 500 gpm) intermittently pumps the stormwater and wastewater from the various power plant related processes to the new oil/water separator that has been in operation since 3/31/11. According to the facility representatives, the system has a surge valve which would bypass treatment and flow directly to Outfall 201 if ever activated. They pointed out that the valve is kept in a locked position. A bypass of oil laden water was recorded on June 12, 2013. As noted above, Outfall 201's flow is estimated by metering running times (hours) of the oil water separator's 2 influent pumps and applying their pump ratings to calculate its flow **(Photo #12).**

Outfall 201 discharges into a manhole mounted on a 48" section of the Outfall 013 pipeline. Here, it mixes with any stormwater and other process wastewater (i.e. Outfall 003) from up gradient as well as any ensuing down gradient stormwater and wastewater (i.e. previously Outfalls 202 & 203, now eliminated) that could be entering this main pipeline which discharges as Outfall 013. There was no discharge from Outfall 201at this particular time of the inspection tour.

(c) Outfalls 202 and 203

Both Outfalls 202 and 203 used to receive blow down discharges from cooling towers for units 15 and 16, respectively, which were then conveyed to Outfall 201. The flows from 202 and 203 were estimated using a valve rating system, according to facility representatives. Outfalls 202 and 203 discharged only when the facility was discarding the cooling water because of high conductivity. Each tower had a pump house for cooling (river) water where pH adjustment could also be made, if necessary. Samples for Outfalls 202 and 203 were collected from the cooling tower sumps. No discharge was observed during the CEI as the cooling towers were not in operation due to the power plant decommissioning. Again, due to plant closure the discharges to outfalls 202 and 203 have been discontinued and both outfalls have been closed.

(d) Outfall 013

Outfall 013 is the facility's largest outfall. It is a 54" pipe that discharges a combined stream of both process wastewater and stormwater. The permit regulates the various discharges originating from 2 oil/water separators, non-contact cooling water, cooling tower blow down, basin cleaning wastes from two cooling towers, and stormwater from several locations within the facility. The flow from Outfall 013 is estimated from the summation of the process outfalls and stormwater runoff calculated using rainfall data and runoff coefficients for the various sections of the facility. This approach appears to be consistent with Part I. B. of the permit.

The outfall discharges into a wetland, a few hundred feet from the Anacostia River (**Photo #17**). Outfall 013 was discharging a small amount of water during the CEI. The water appeared to be clear and turbidity free, possibly groundwater infiltration. The receiving water at the discharge point of 013 was brownish in color, turbid or cloudy in appearance. It was not apparent where the turbidity originated from but it did not seem to be directly related to the current observed effluent stream. There were other outfall pipes adjacent to Outfall 013 which apparently discharged stormwater from nearby areas of the District.

(e) Outfall 101

Outfall 101 discharges stormwater to the Anacostia River, and is located near the facility's river water intake point. It conveys runoff from the transformer area on the west side of the power plant building. As noted above, the facility completed their compliance schedule to allow representative sampling for Outfall 101 since Manhole K, its original monitoring location, has often been impacted by high tides from the Anacostia River. Since there was no stormwater runoff to the source inlets at this time, there was no Outfall 101discharge to the river except for possible groundwater seepage into the storm drain system or tidal water.

11. Findings/ Follow up

- A total of 20 effluent limit excursions were recorded since the completion of the 2012 CEI. Proper notification was provided to EPA for each of the excursions.
- A treatment system bypass was reported for June 12, 2013. During a large rain event No. 4 oil spilled into the basement and oil laden water from the plant basement overwhelmed

and bypassed the oil water separator and was discharged out of outfall 013 to the Anacostia River. Pepco reported to EPA that approximately 10 gallons of oil was discharged to the Anacostia River. DDOE inspectors who investigated the incident estimated the discharge to be in the order of several hundreds of gallons of oil **(Attachment 5)**.

Attachments

1. Photo Log.
2. EPA Form 3560-3 - Water Compliance Inspection Report
3. Fact Sheet: Dismantling and Removal of the Benning Power Plant Under Way
4. Fact Sheet: Decommissioning of the Benning Power Plant Under Way
5. DDOE WQD June 11, 2013 Emergency Response Report

Inspection Photo Log

Water/NPDES Compliance Evaluation Inspection
Potomac Electric Power Company (PEPCO), Inc.
Benning Generating Station
3400 Benning Road, NE
Washington, DC 20019

NPDES No. DC0000094

Inspection Date: November 20, 2013

DDOE Inspectors: Adion Chinkuyu, P.E., Environmental Engineer

Isaac Kelley, Environmental Protection Specialist

David Pilat, Environmental Protection Specialist

PEPCO Representatives:

1. Fariba Mahvi, Lead Environmental Engineer (PEPCO Holdings, Inc),
2. Heather Brinkerhoff, HB Consulting, LLC,
3. Mike Williams, Power Plant Asset Manager (PEPCO Energy Services),
4. Roger Williams, Environmental/Safety Manager (PEPCO Energy Services),
5. Steve Ortel Lab Manager, (PEPCO Holdings, Inc.),

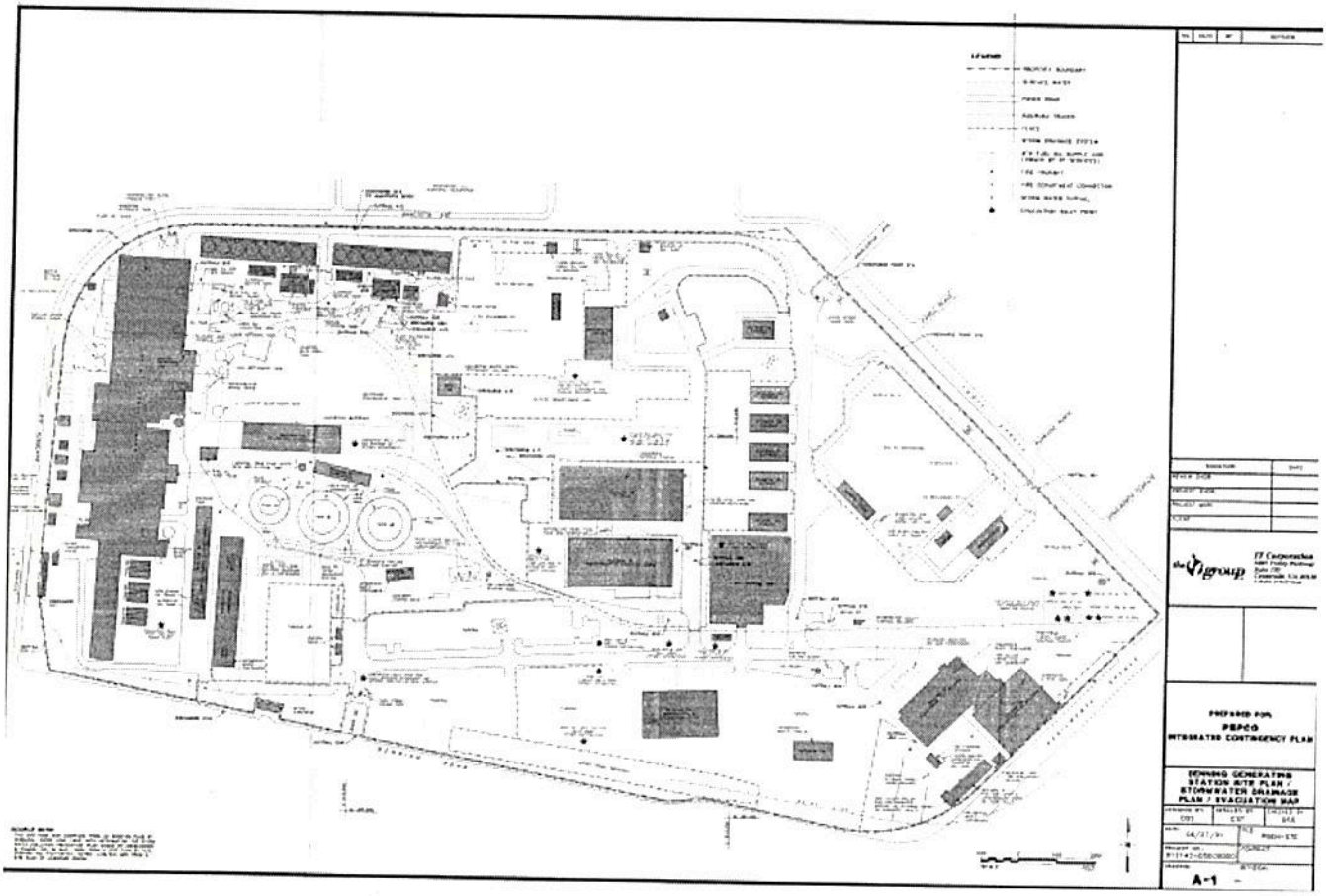


Figure 1: PEPCO Benning Generating Station – site plan and stormwater drainage plan.

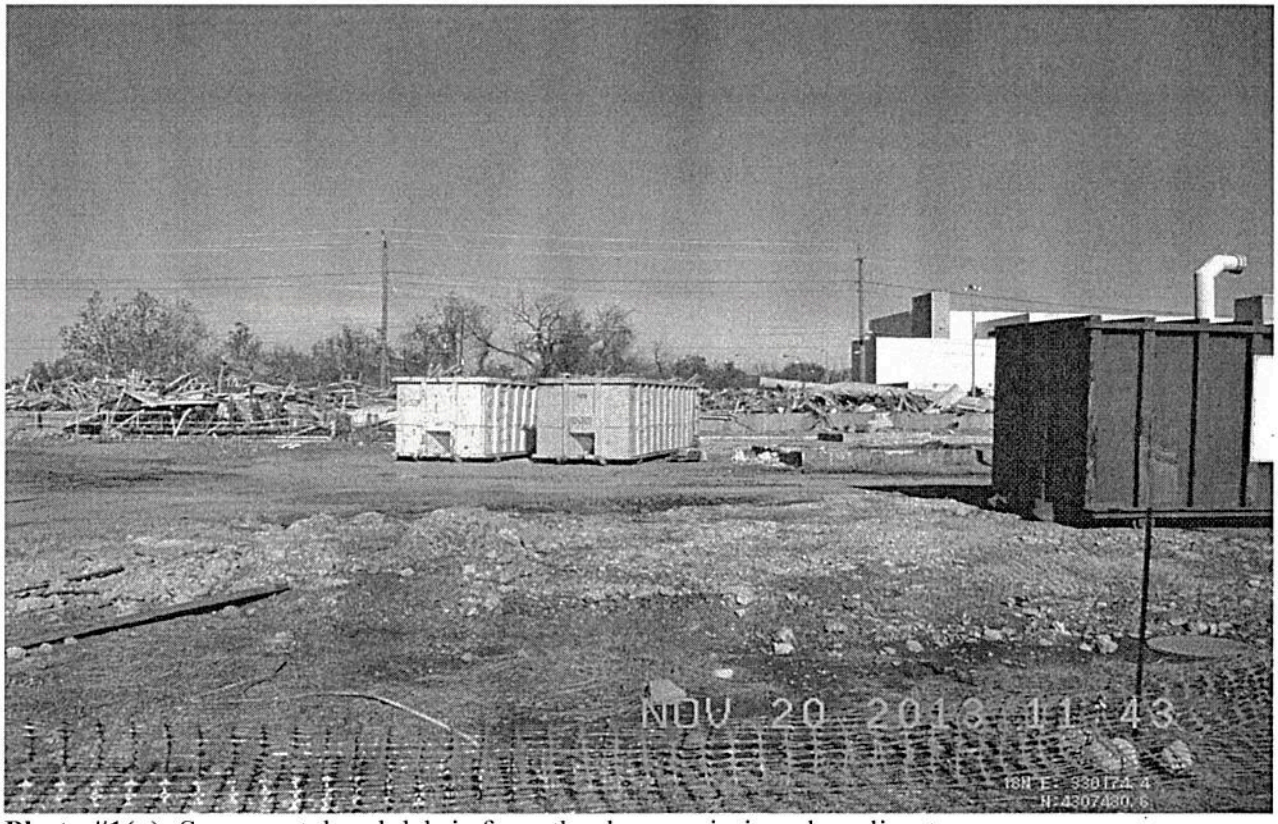


Photo #1(a): Scrap metal and debris from the decommissioned cooling towers.

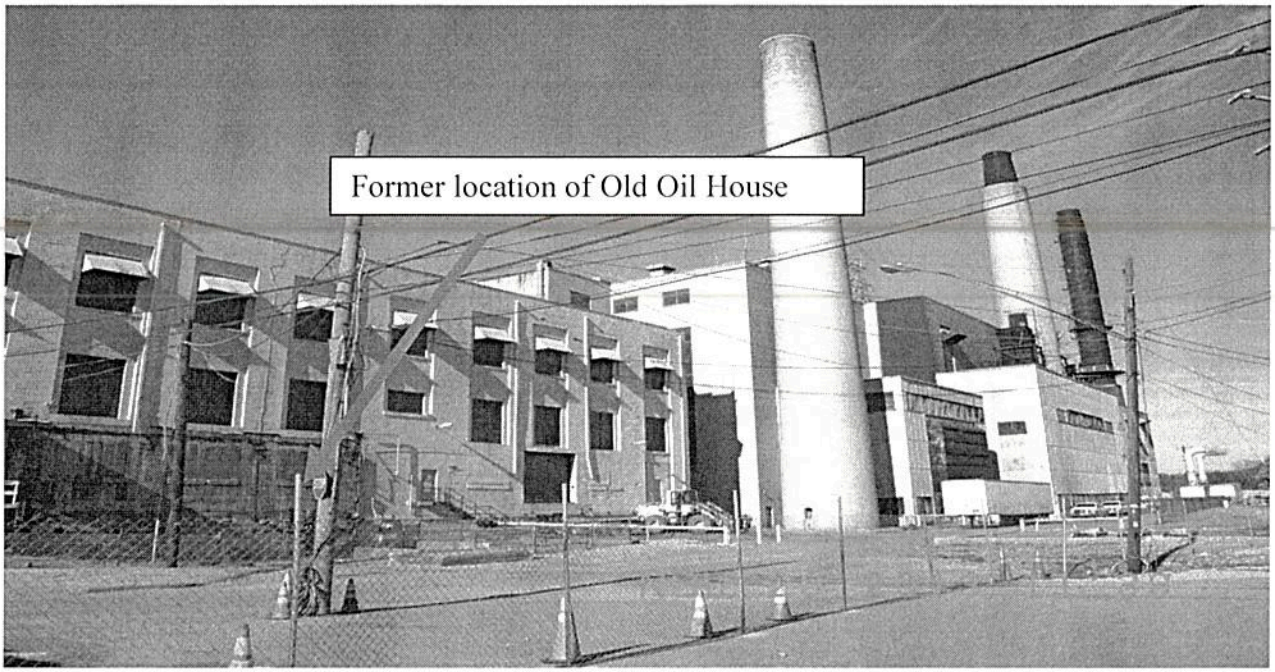


Photo #1(b): The former location of the old oil house (orange fencing), removed as part of decommissioning process.

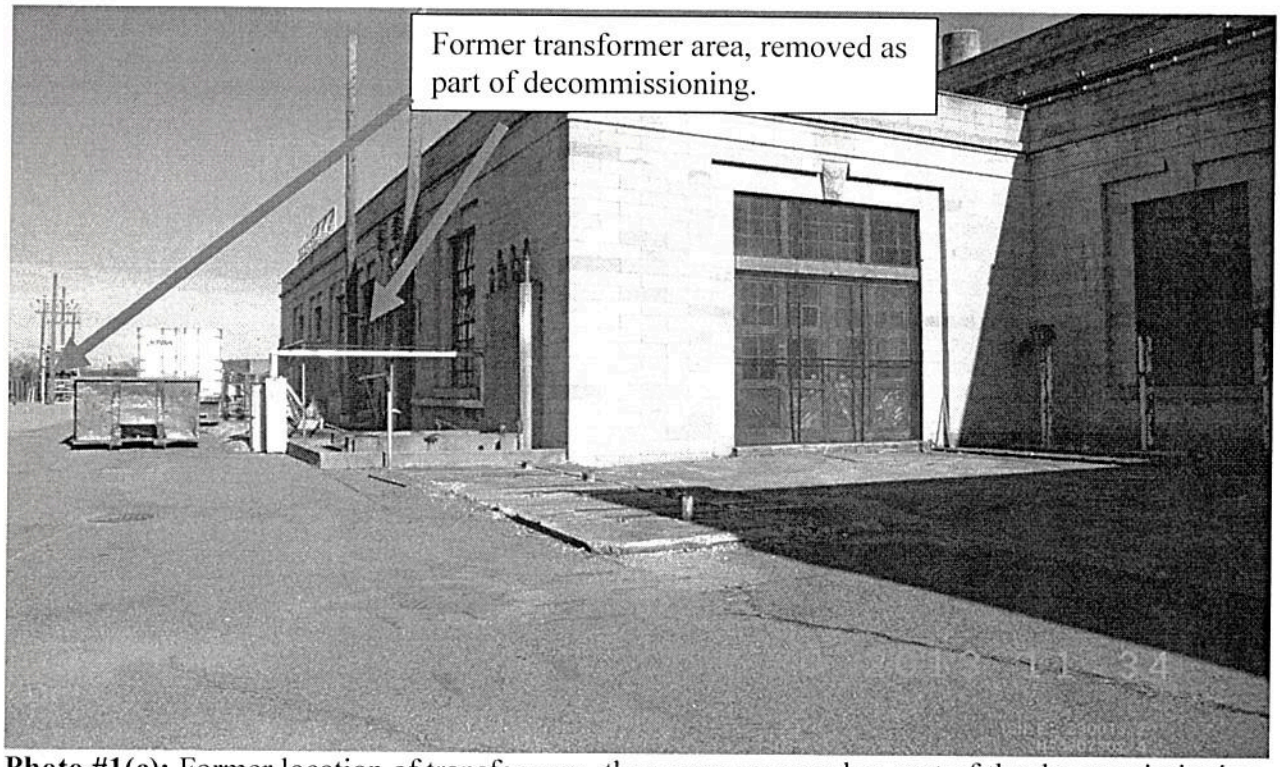


Photo #1(c): Former location of transformers, they were removed as part of the decommissioning process.

Photo #2: Non-expired pH buffers in the in-house lab at PEPCO.

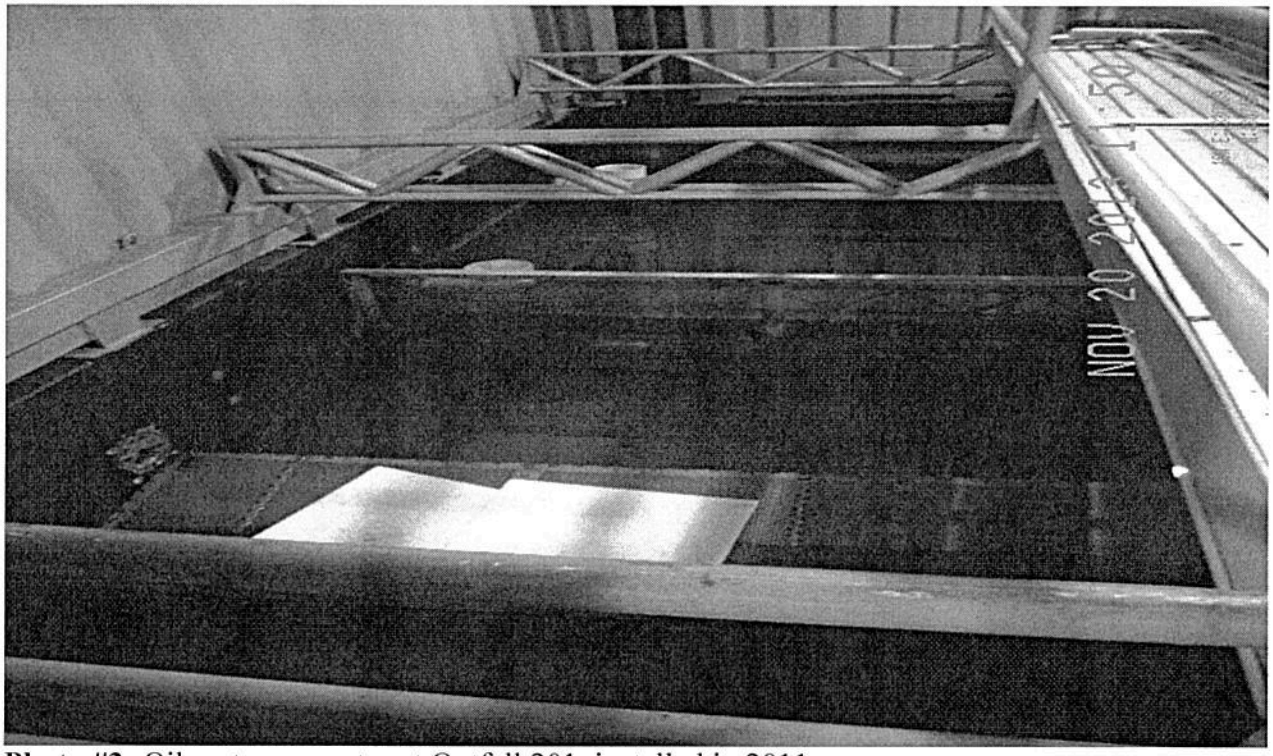


Photo #3: Oil-water separator at Outfall 201, installed in 2011.

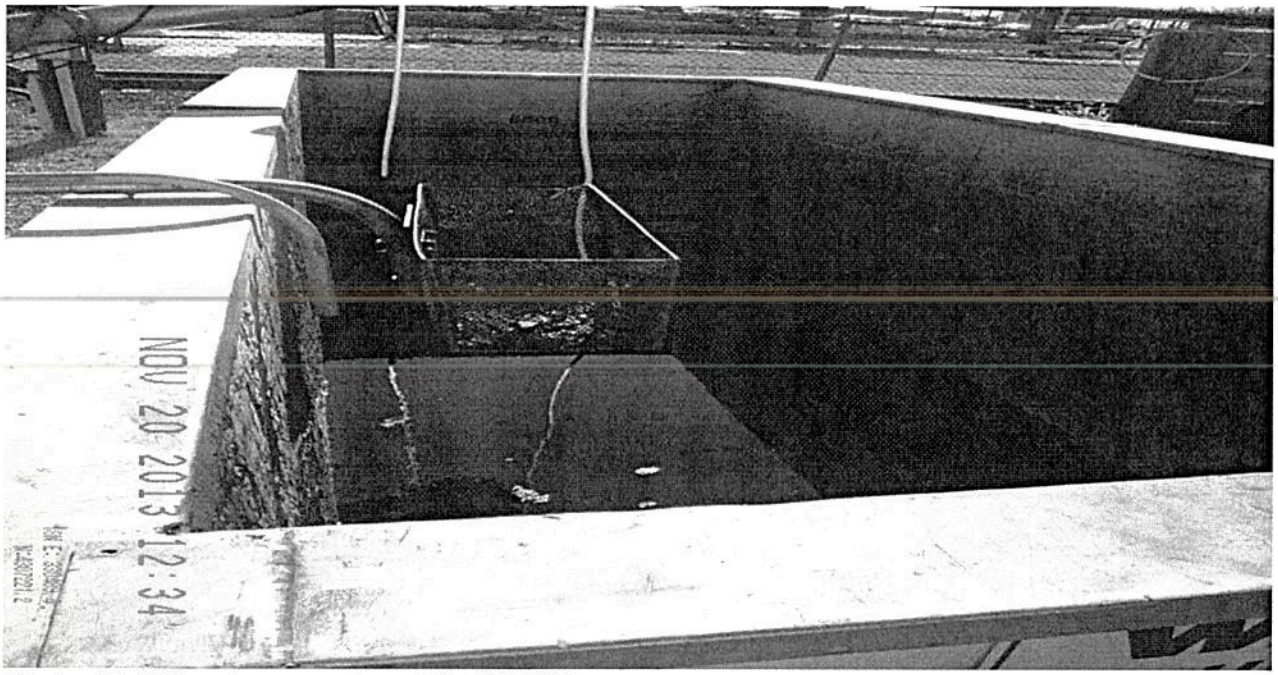


Photo #4: Oil-water separator at Outfall 003.

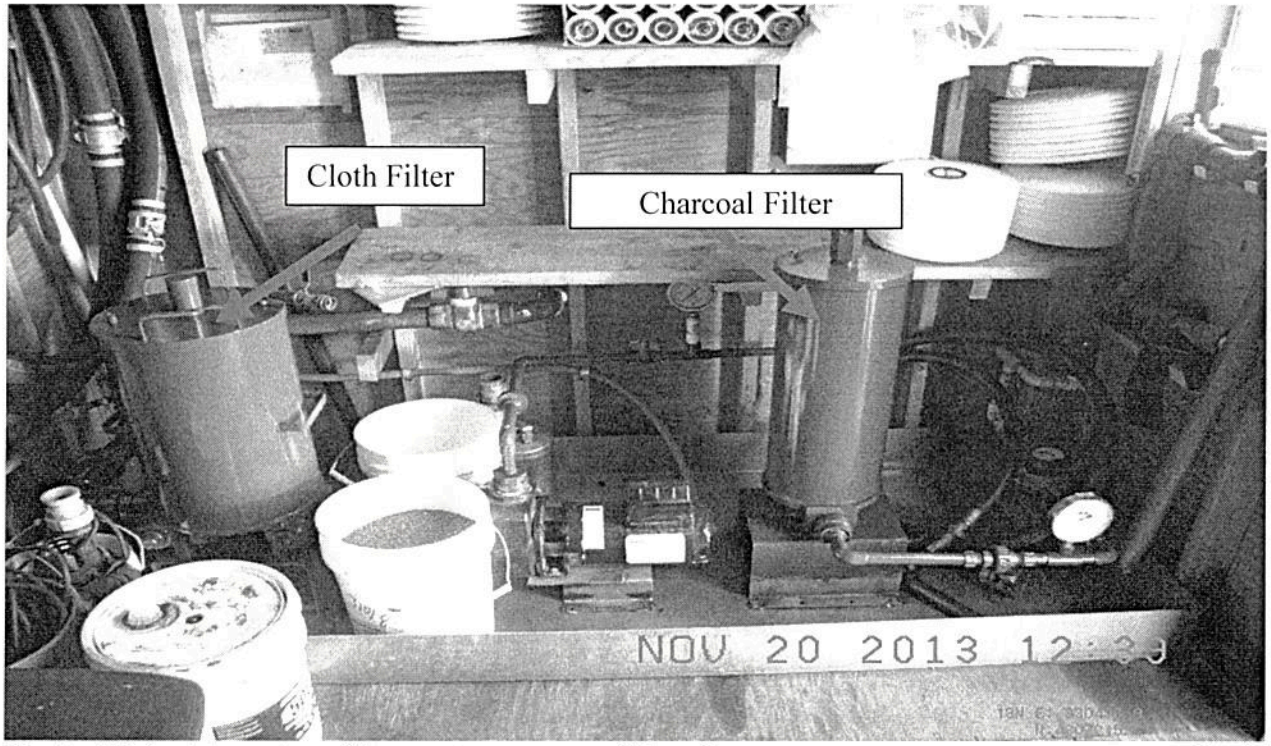


Photo #5(a): A two-stage filter system as part of the oil-water separator treatment system at Outfall 003.

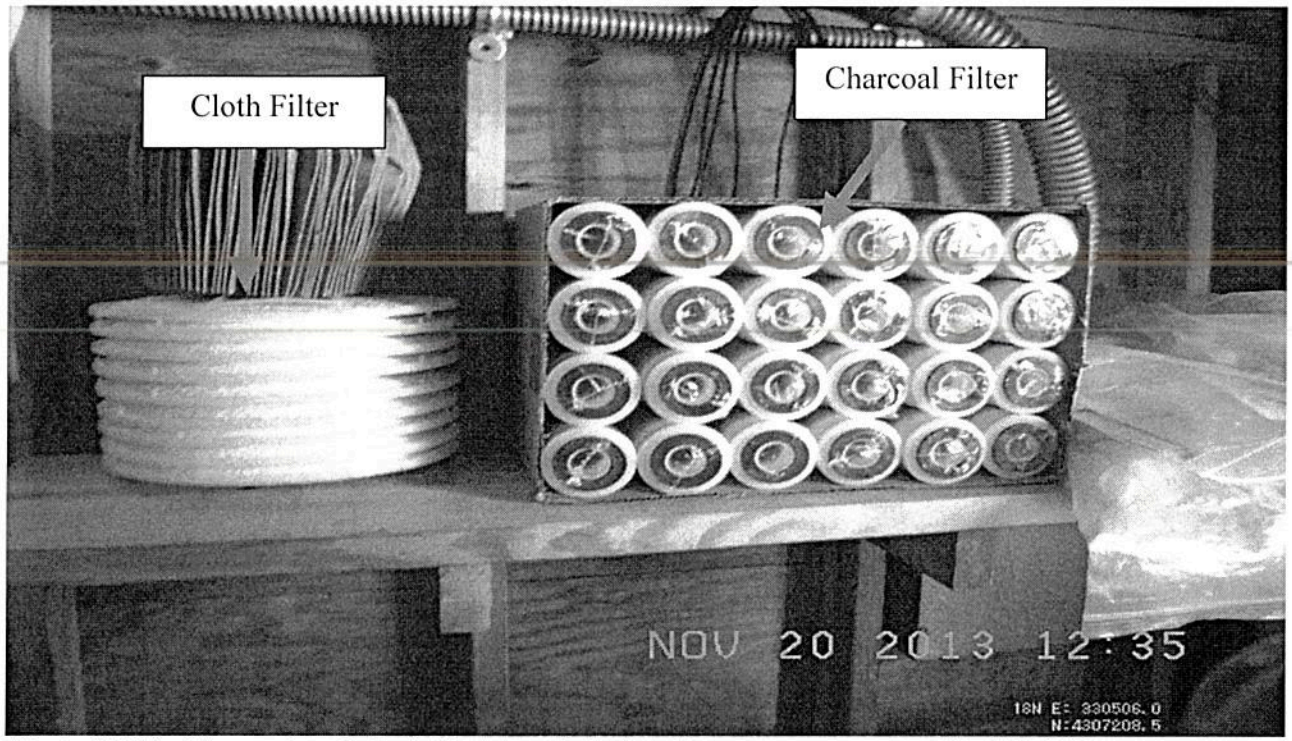


Photo #5(b): Charcoal and cloth filters used in the oil-water separator at Outfall 003.

Photo #6: Outfall 013 at the Anacostia River (receiving waters). Notice the additional Outfall pipe on the left.

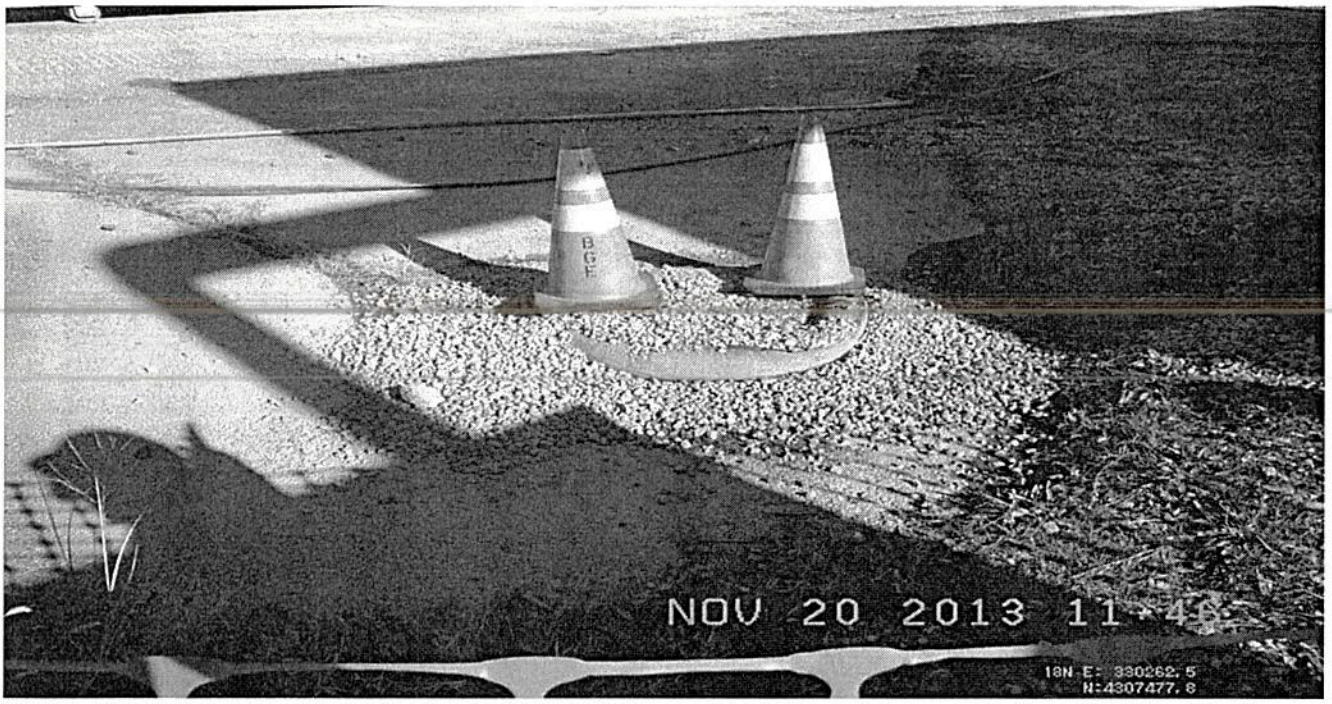


Photo #7: Storm sewer catch basins located in the work area have been marked, protected with rip-rap and oil absorbent boom.

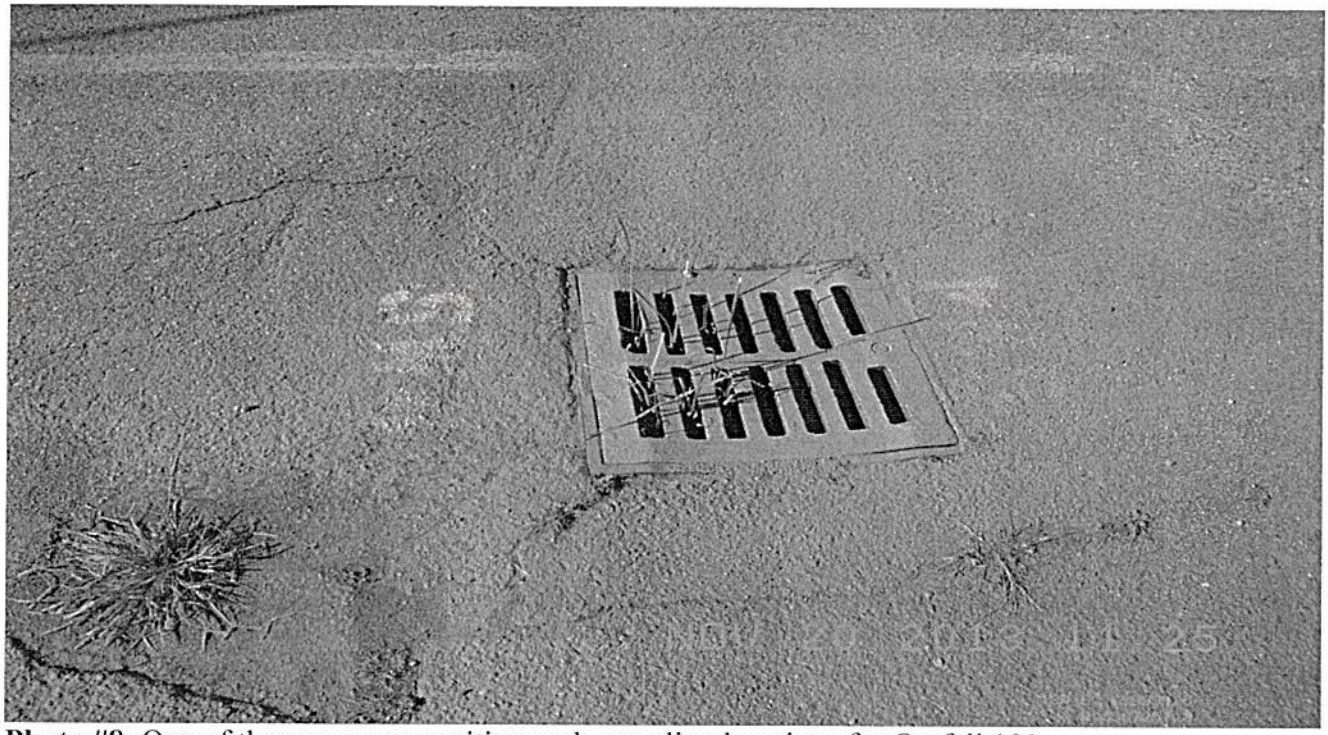


Photo #8: One of the seven compositing grab sampling locations for Outfall 101.

Photo #9: Best management practices –filter cloth and oil absorbent boom placed over stormwater catch basin.

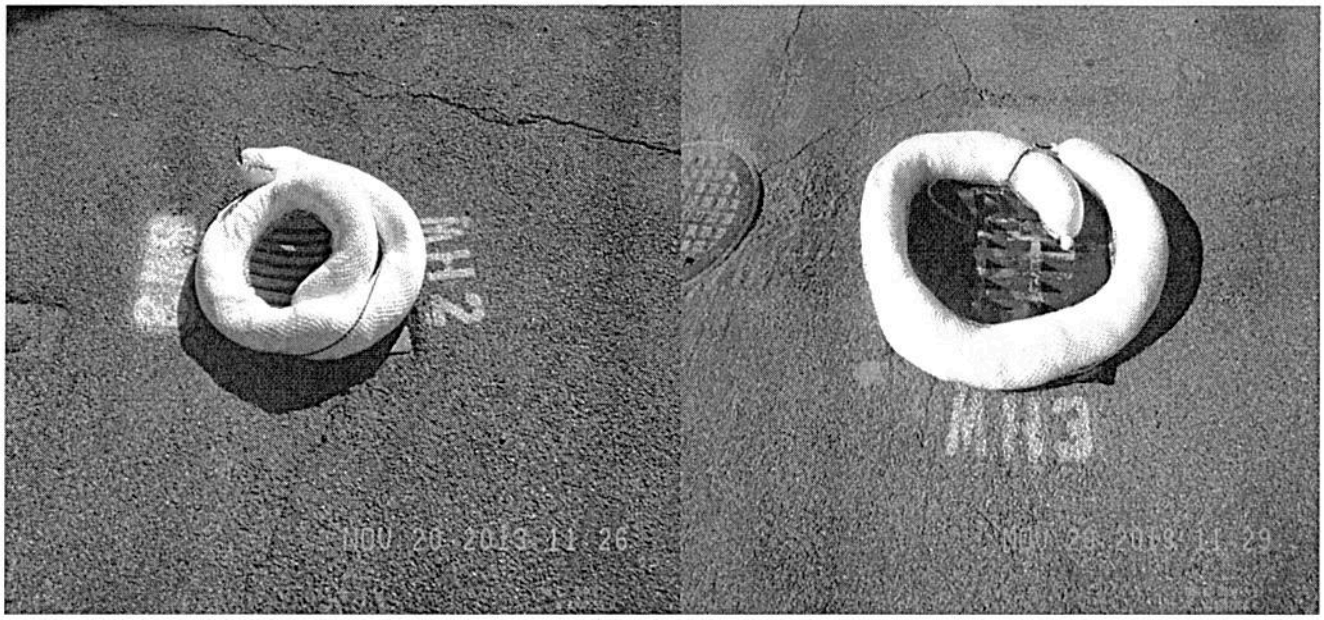


Photo #10: Two of the seven upstream storm drains that are sampled as part of a composite sample that represents the discharges to Manhole K.

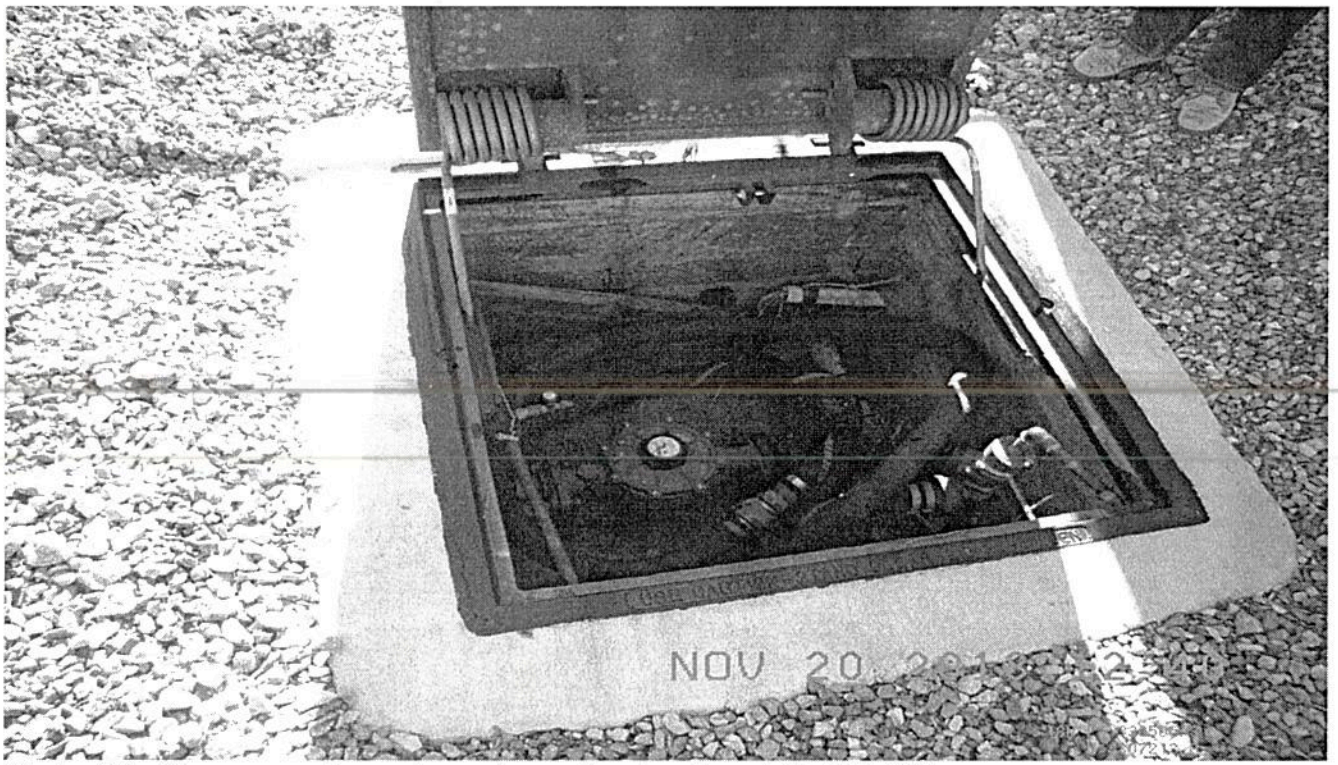


Photo #11: Flow measuring meter and sampling location at Outfall 003.

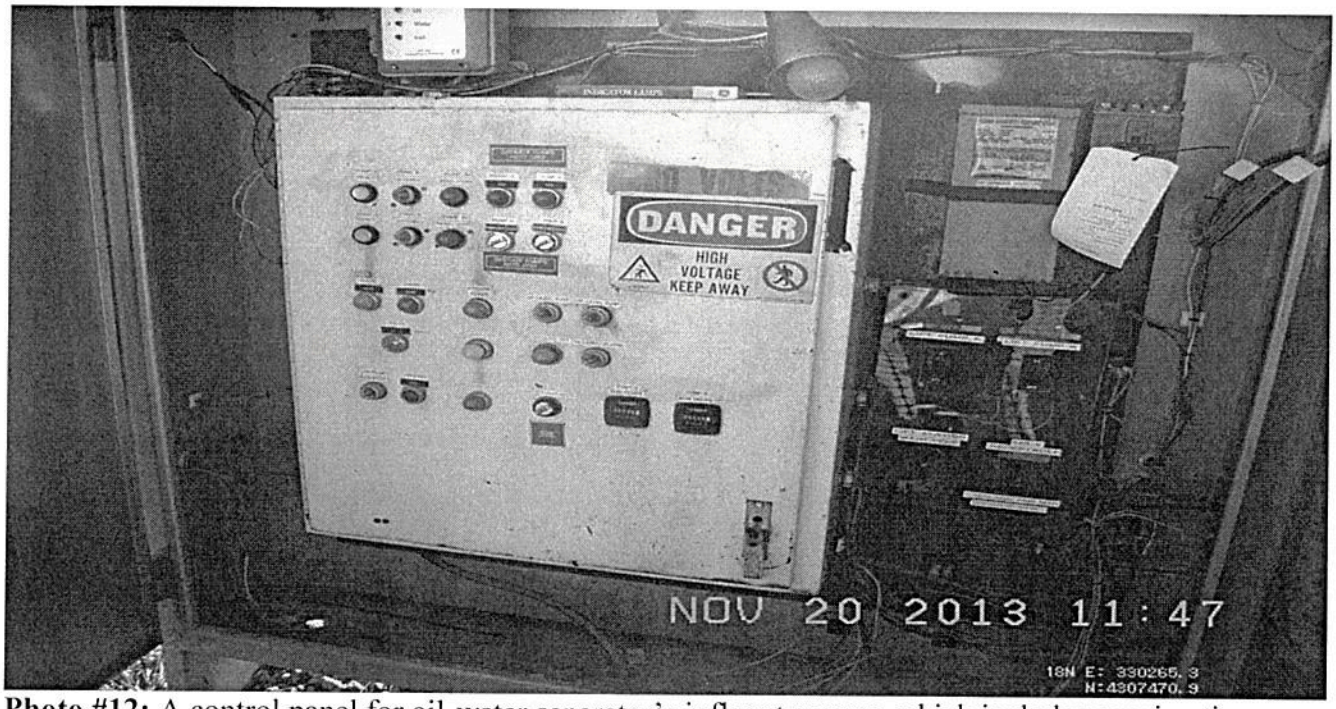


Photo #12: A control panel for oil-water separator's influent pumps, which includes running time (hours) meters used to estimate flow at Outfall 201.

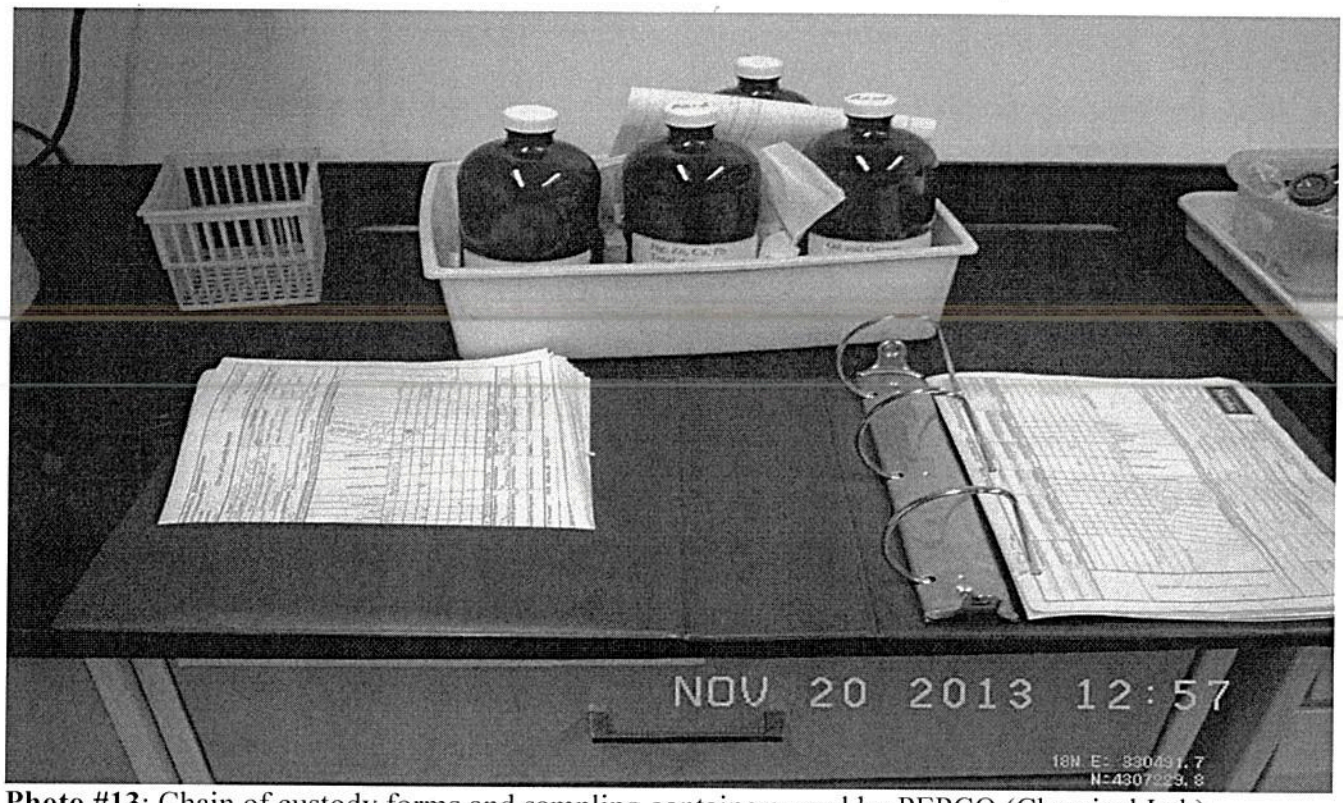


Photo #13: Chain of custody forms and sampling containers used by PEPCO (Chemical Lab).

Photo # 14: Expired pH buffers in the storage area at the power generation station.

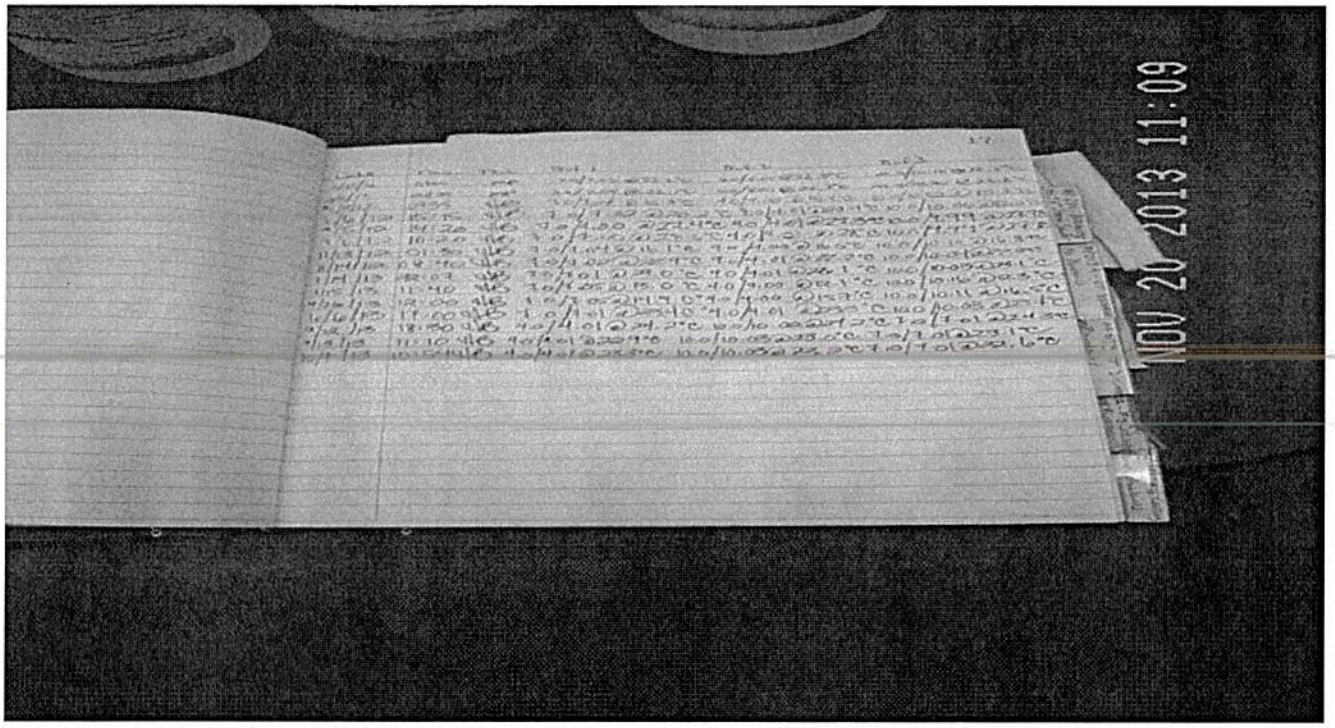


Photo #15: Up to date calibration records for pH probe used by PES personal.

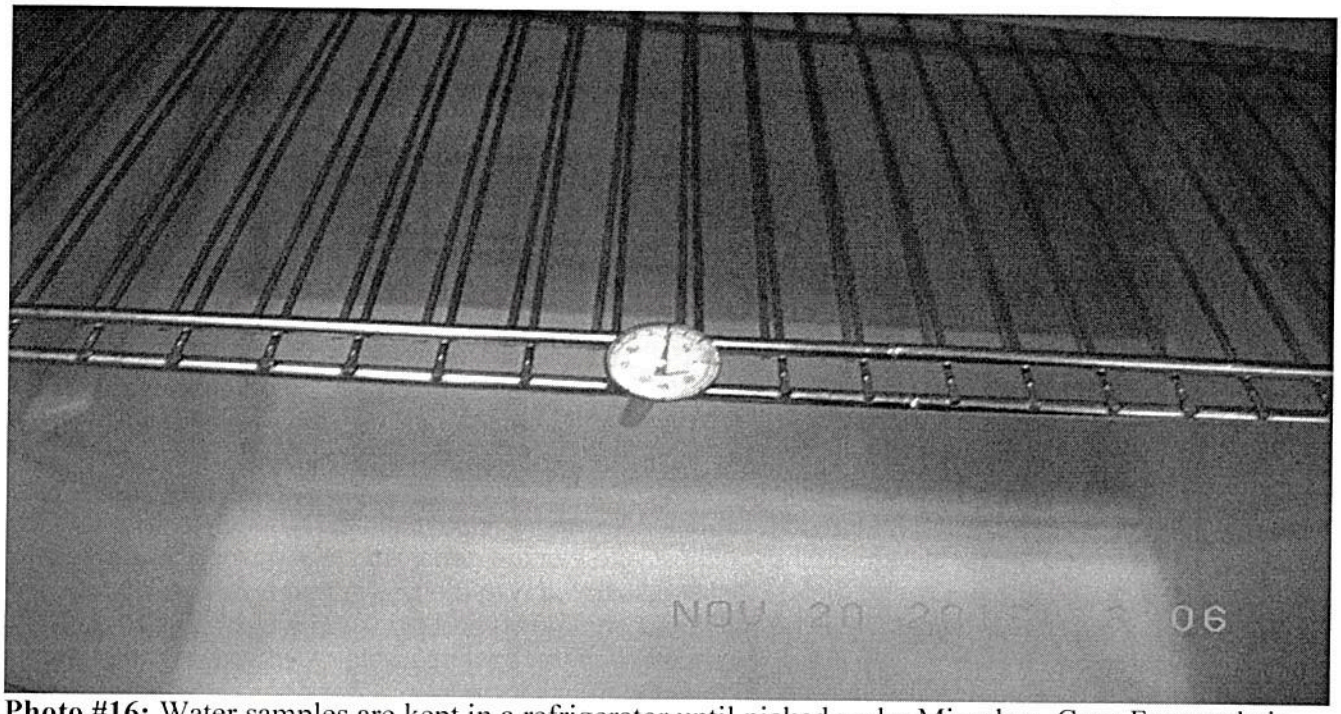


Photo #16: Water samples are kept in a refrigerator until picked up by Microbac, Cape Fear or their courier's. Note the thermometers used to monitor the temperature in the refrigerator.

Photo # 17: Outfall 013 discharges into the Anacostia River in a wetland.

FACT SHEET

pepco Energy Services

Dismantling and Removal of the Benning Power Plant Under Way

Project Overview
Pepco Energy Services (PES) continues to make progress on the planned dismantling and removal of the Benning Power Plant, which is no longer necessary to provide the community's energy needs.

Operations at the Benning Power Plant ceased in June 2012 as planned and approved by regional power authorities. PES then placed the plant into an idle condition termed a "cold closure," a condition in which the major plant equipment such as the steam turbines, boilers and electric generators are no longer operable. As part of the cold closure, the above-ground fuel oil tanks associated with the power plant were emptied, dismantled, and removed from the site. Once the plant was shut down and placed in a cold closure state, PES determined that dismantling and removing the plant would be in the best interests of PES, the District of Columbia, and the local community. The benefits to the community include:

- Elimination of air emissions from burning of fuel oil at the power plant.
- Elimination of fuel oil storage and oil truck deliveries.
- Removal of the visual impact of the power plant and the smoke stacks.
- Removal of any hazardous materials in the power plant.

As described in more detail below, the dismantling and removal of the power plant is a carefully planned and executed project which is currently slated for the following timeline:

Project Timeline
Dismantling of the power plant can be grouped into the following phases: Phase 1: Dismantling of the cooling towers; Phase 2: Demolition of the Benning Power Plant buildings and equipment; Phase 3: Implosion of selected structures; Phase 4: Site restoration.

Phase 1: Dismantling of the cooling towers (*September 2013 - December 2013)*
Crews have started to dismantle the two cooling towers adjacent to the power plant with an estimated completion date in December 2013. These structures are made primarily of wood, plastic, fiberglass, and steel, so conventional methods of demolition — including hammers, shears and heavy equipment — will be used. The work is being performed with all of the required regulatory, environmental and local agency permits.

Phase 2: Demolition of the Benning Power Plant buildings and equipment (*November 2013 – fall 2014)*
The second phase of the project focuses on the dismantling and removal or demolition of the main power plant structures located in the western portion of the Benning Road site, including the five smoke stacks and the buildings that housed the power plant equipment. Crews will continue to use conventional methods of demolition to dismantle most of the plant structures. The work will be performed with all of the required regulatory, environmental and local agency permits. All removal of asbestos and other potentially hazardous building materials will occur under carefully controlled conditions so they are not released during general demolition.

Phase 3: Implosion of the Benning Power Plant (*Summer/fall 2014)*
The company will hire an experienced and highly specialized contractor – with a proven safety record - to use controlled explosive charges to take down a portion of the power plant structures (approximately 30 percent). The implosion will be a one-time event lasting up to five minutes with public notifications and considerable

planning, monitoring, safety measures and dust containment. PES is committed to working safely and respectfully in the neighborhood. We will comply with all regulatory, environmental and local agency requirements regarding this process, and will provide more details as the plans for this work are finalized.

Phase 4: Restoration (*Summer/fall 2014)*
Once the power plant structures have been removed, the foundation will be graded and leveled. At the completion of the project, the site will be inspected and all construction equipment will be removed.

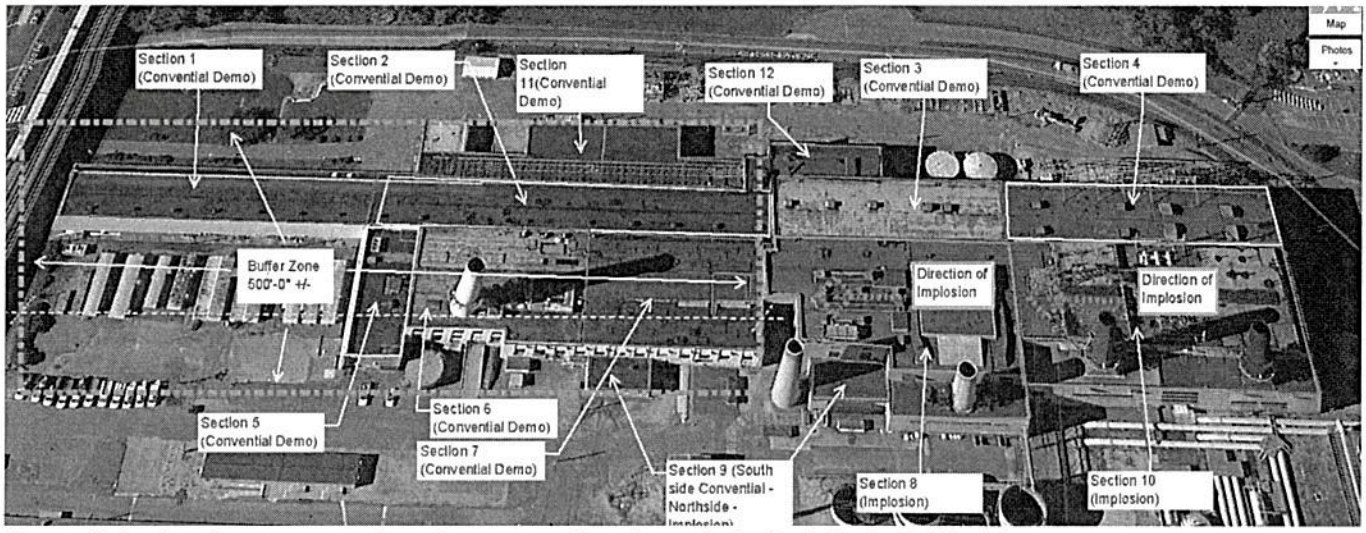
Impact on the Community
PES will work diligently to minimize the impact of the power plant demolition project on residents in surrounding communities and is committed to keeping the community informed every step of the way. During the demolition process, crews will enter the area through the 34th Street gate and will exit onto Anacostia Avenue near the Park Service's maintenance facility. In accordance with the applicable federal and District of Columbia air permit mandates, all trucks removing debris will be fully covered to avoid spillage on the roads. During the initial phase of the project, 10 to 20 trucks are anticipated to enter and exit the station each day. On some days, the number of trucks will be significantly fewer.

As the project continues, the number of trucks entering and exiting the site will increase to between 20 and 50 trucks per day. PES submitted its traffic plan to the District of Columbia Department of Transportation (DDOT) and is also working with DDOT to identify the best times of travel to avoid creating traffic problems.

- Work will be performed between 7 a.m. and 7 p.m. Monday-Friday. Noise levels from power plant demolition will comply with city noise ordinances (and PES expects noise levels to be minimal).
- All power plant demolition and debris removal activities will be conducted in accordance with all applicable environmental and other regulatory requirements.
- All hazardous materials will be safely removed from each section of the power plant prior to demolition of that section.
- All water used in the management of dust suppression will be managed in accordance with applicable storm water runoff management regulations. Additionally, erosion control/filtration measures will be used to prevent sediment from entering the storm drainage system.

PES's Commitment to Keeping you Informed
It is our commitment to the community that the dismantling and removal is conducted safely and in compliance with all applicable government regulations and standards. PES site supervisors, contractors, and security and safety teams have established appropriate procedures to monitor all work activities and prevent any potential hazard. For more information and updates, community members can visit the website at benningservicecenter.com or call (202) 730-1199.

Project Map



Demolished using conventional means: Sections 1, 2, 3, 4, 5, 6, 7, 11, 12
Imploded using controlled explosive charges: Sections 8, 9, 10

FACT SHEET

Pepco Energy Services

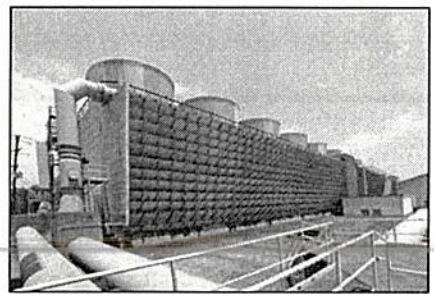
Sept. 9, 2013

1300 North 17th Street, Suite 1500
Arlington, VA 22209
pepcoenergy.com
NYSE: POM

Decommissioning of the Benning Power Plant Under Way

Project Overview
As part of the Benning Power Plant decommissioning, Pepco Energy Services (PES) is preparing to demolish the plant's two cooling towers this month. Demolishing the cooling towers follows the June 2012 shutdown of the power plant and is not related to environmental factors or the Benning Road Remedial Investigation/Feasibility Study Consent Decree. The demolition activities will be conducted safely and in compliance with all applicable government regulations and standards.

Project Timeline
PES plans to start the demolition of the power plant's two cooling towers at the Benning Road Service Center on Sept. 23. As part of this process, crews will begin by taking down the superstructure of the cooling towers. These structures are made primarily of wood, plastic, fiberglass, and steel so conventional methods of demolition — including hammers, shears and heavy equipment — will be used. Once the towers are removed, the concrete cooling tower basins will be removed and the area where the cooling towers stood will be filled to grade. Completion of the removal of the cooling towers is targeted for December 2013, however demolition work associated with other power plant equipment will continue throughout this year.



What is a cooling tower?
The cooling towers are the structures located along the northwest side of the property that were used only when the power plant was operating. This equipment was used to remove heat from the process water circulating in the power plant during operation. During the limited periods of operation, these cooling towers made it possible for the water in the power plant to be recirculated and air cooled before being returned to the river.

Impact on the Community
PES will work diligently to minimize the impact of the cooling tower demolition on residents in communities near the power plant and is committed to keeping the community informed about this project.

- During the demolition process, crews will enter the area through the 34th Street Gate and exit onto Anacostia Avenue near the Park Service's maintenance facility. PES expects about eight to 10 trucks will pass through the demolition site each day. In accordance with Title V air permit mandates, all trucks removing demolition debris will be fully covered to avoid spillage on the roads.
- Work will be performed between 7 a.m. and 7 p.m. Monday-Friday.
- PES will take reasonable precautions to minimize the emission of dust. PES projects the cooling tower demolition will generate very little dusting because of the type of materials used. However, if dusting does occur, PES will control the dust by misting the cooling tower vicinity with water.
- PES projects noise levels from cooling tower demolition will be minimal and will comply with city noise ordinances.
- Residents may see a small amount of smoke for two or three days per cooling tower as a result of metal cutting activities.
- All cooling tower demolition and debris removal activities will be conducted in accordance with all applicable environmental and other regulatory requirements.

PES's Commitment to Keeping you Informed
It is our commitment to the community that the demolition process is safe and conducted in compliance with all applicable government regulations and standards. PES site supervisors, contractors and security and safety teams have established appropriate procedures to safely monitor the demolition activities and prevent any potential hazard. For more information and updates, community members can visit the dedicated website at benningservicecenter.com or call (202) 730-1199.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
District Department of the Environment

Natural Resources Administration
Water Quality Division

Emergency Response Report

NRC Number: 1049980
Case Number: 130611.1
Complaint: Discharge of oil to permitted outfall
Location: 3400 Benning Rd., NE (Pepco Power Plant)
Date Incident Reported: June 11, 2013 at 9:05 AM
Date of Investigation: June 11, 2013 at 11:15 AM
Name of Inspector(s): Jacob Zangrilli; Ibrahim Famuditimi; David Pilat

Contacts:
Michael V. Williams (Pepco Energy Services)
Power Plant Asset Manager
1300 North 17th St., Suite 1600
Arlington, VA 22209
O: 703-253-1787 C: 202-841-1344

Heather L. Brinkerhoff
HB Consulting, LLC
Environmental Health and Safety Support and Reporting Services
C: 202-330-7431

John Tettis (Pepco Energy Services)
301-706-7479

Executive Summary:
On June 11, 2013 at 9:05 AM Pepco Energy Services manager Mike Williams reported a discharge of 10 gallons of number 4 fuel oil to their permitted outfall 213/013 to the National Response Center. DDOE responded to the release and arrived at 3400 Benning Rd., NE Washington, DC at approximately 11:15 AM. According to Pepco Energy Services representative John Tettis, an oil detection alarm attached to the oil water separator house was going off when Pepco Energy Services

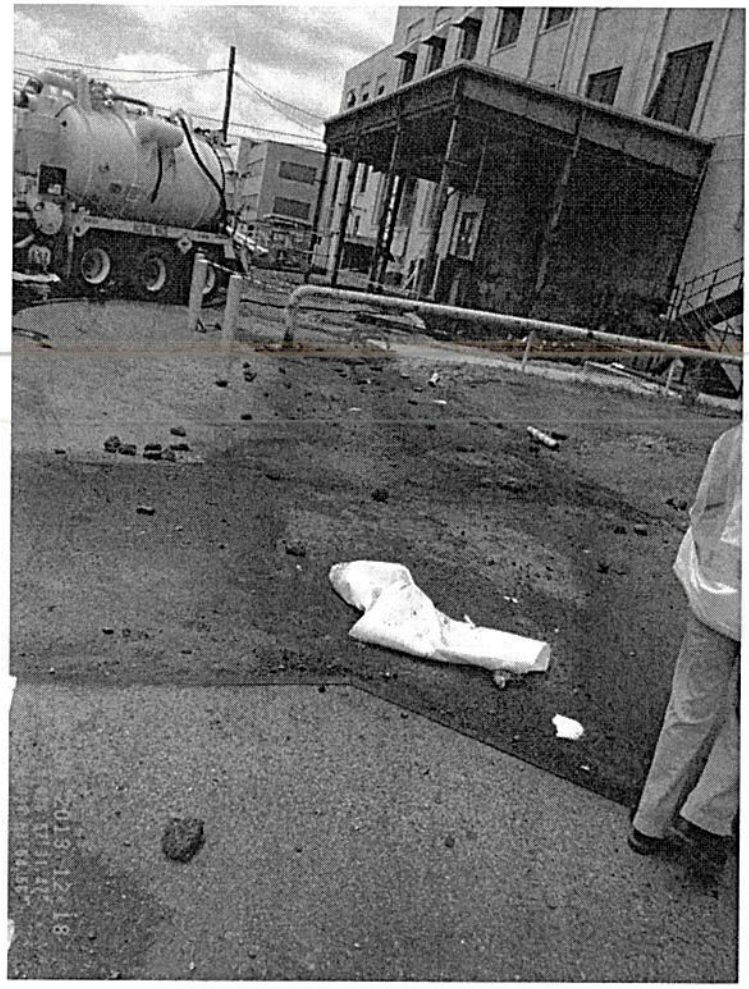


Figure 1 *Photo of the old oil house and stormwater structure where the oil discharge is likely to have originated.*

arrived in the morning at 7:00 AM. Pepco manually shut down the pump sending water from the oil water separator to outfall 213/013 at 7:30 AM. The time that the alarm began sounding is unknown.

Pepco was able to contain and absorb the majority of oil observed in the vicinity of the outfall by the close of business on June 11, 2013. Their contractor, A2Z, used approximately 2 bales of absorbent sheets during the initial cleanup. Based upon DDOE observations on June 11 and June 12, 2013, it is believed that a larger volume of oil was released to the river than initially reported by Pepco. Pepco is currently unable to verify with any certainty the source of the oil, or the cause of the discharge. Outfall 213/013 is located in a tidal segment of the Anacostia River.

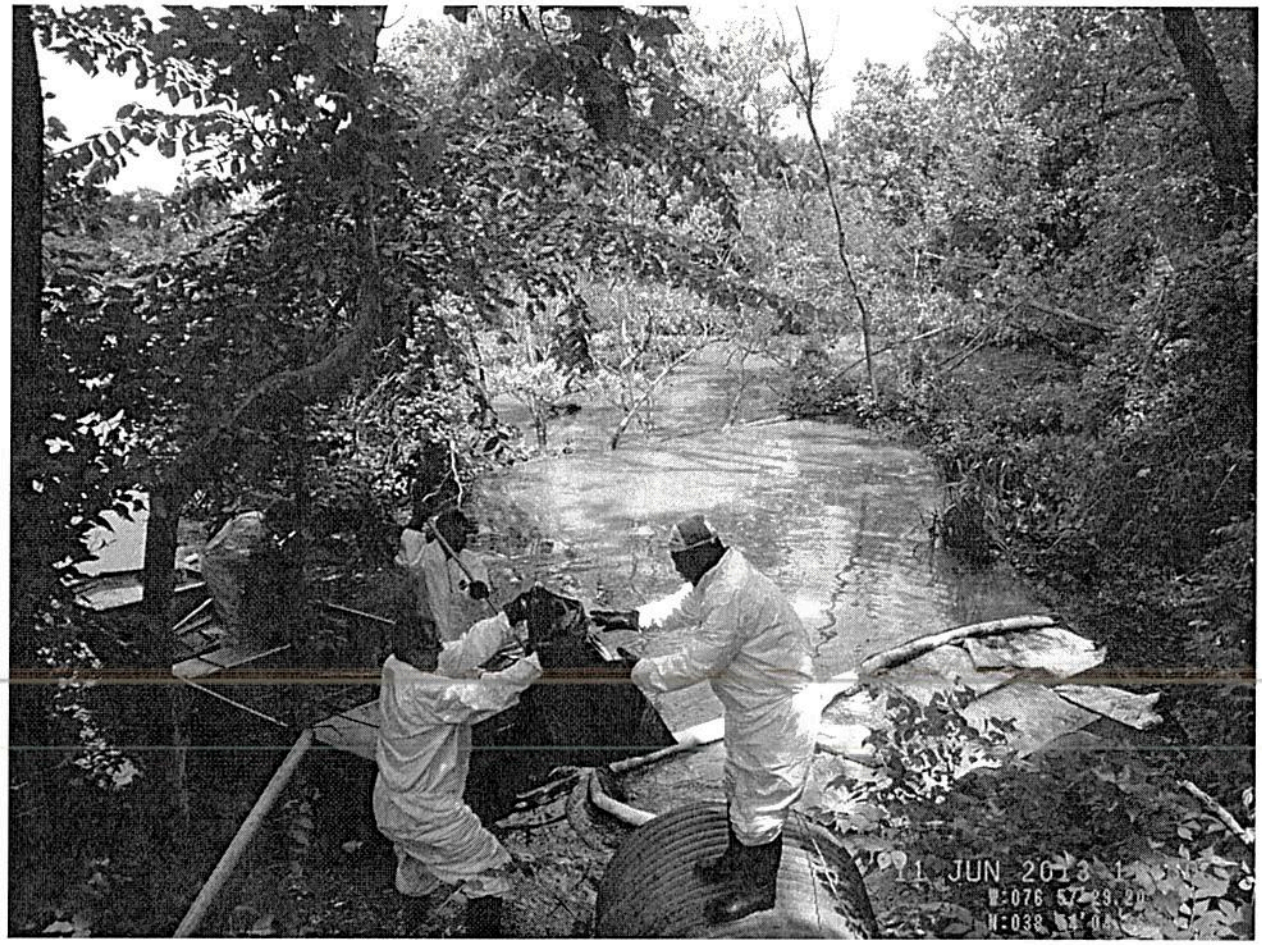


Figure 2 *Spill cleanup being performed by A2Z. Outfall 213/013 is visible in the foreground, and a dark patch of oil is visible around the John Boat in the photograph.*

Investigation:
June 11, 2013

I responded to the spill report with the DDOE Emergency Management Coordinator John Emminizer, and Site Remedial Investigation/Feasibility Study project manager for the Benning Road Power Plant Apurva Patil, at 11:15 AM. We entered the office of Mr. Mike Williams, who described the situation as an estimated 10 gallon spill of number 4 oil resultant of the heavy rainfall received the evening of June 10, 2013. According to Mr. Williams, Pepco Energy

Services suspects that the oil was released to the storm sewer system from somewhere near the old oil house building that is adjacent to the power plant.

Mr. John Tettis escorted us to the old oil house. The old oil house and the Pepco power plant is currently out of service and is in the process of being decommissioned. The old oil house consisted of an open air concrete containment pit approximately five feet below ground surface with a covered roof. There were two visible floor drains and several severed pipes located in the area. Mr. Tettis told us that the old oil house used to contain heaters which were recently drained and removed. Mr. Tettis stated that Pepco Energy Services believes that the rains caused four feet of water to accumulate in the old oil house, which pushed water through the floor drains in the old oil house and dislodged oil somewhere. When I inquired as to where the oil came from, Mr. Tettis was unable to definitively answer the question, and directed us to the Pepco permitted outfall 213/013 located in an alcove on the Anacostia River.

At approximately 11:45 AM, we reached outfall 213/013 and I observed a thickness of oil on the surface of the water outside of outfall 213/013 of approximately 30 feet by 10 feet. The vegetation in an approximately 70 foot radius around the outfall also exhibited evidence of being impacted by oil. There was an oil smear on the impacted vegetation approximately 1.5 feet. At this time, A2Z, a contractor being used by Pepco for the demolition of the power plant, had contained the spill inside a boomed area, and was placing absorbent sheets on the oil product. A2Z also used netting to remove the oiled debris in the area. The oiled debris was placed in plastic garbage bags and stationed on a plastic liner prior to being loaded into a lined roll off and disposed of offsite.

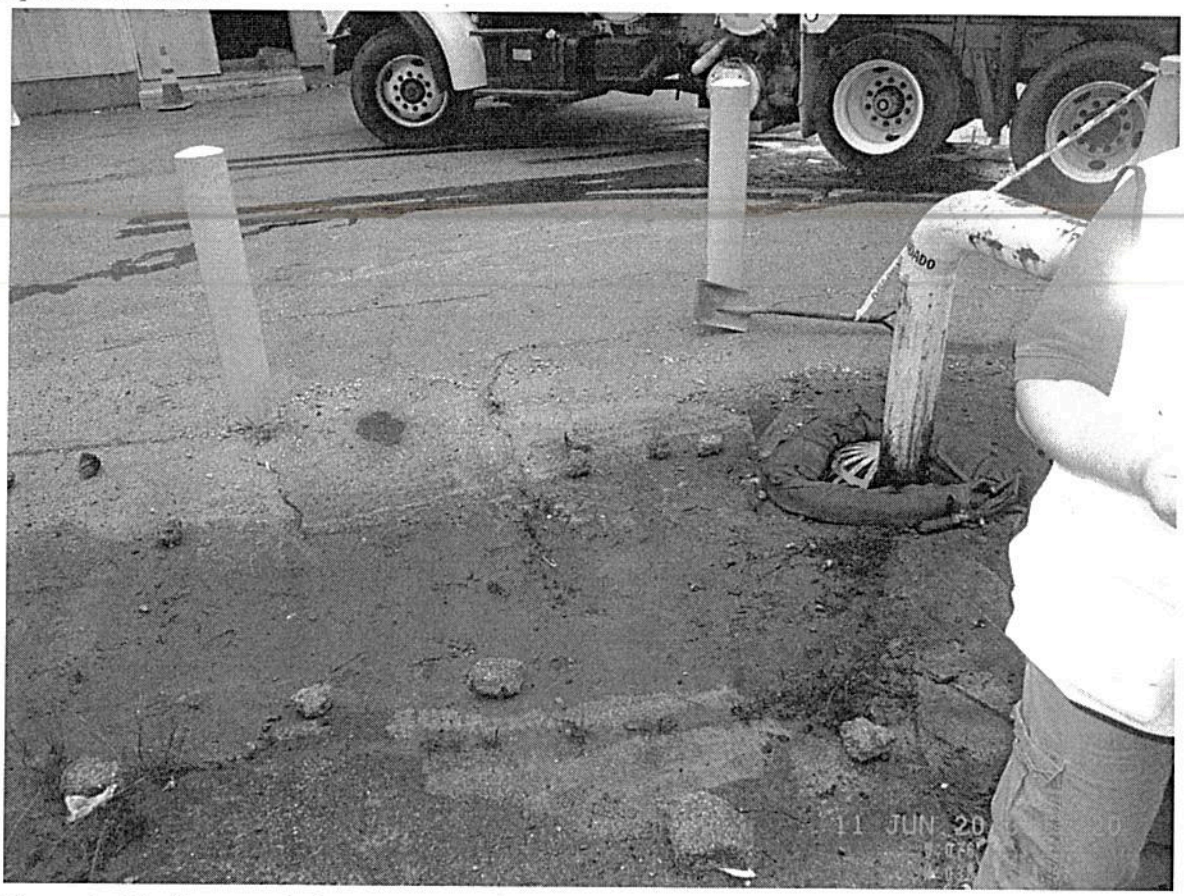


Figure 3 *Oiled boom and oil staining the concrete in the vicinity of the white pipe that discharges to Pepco's stormwater system. The pipe originates from a sump in the ash cellar of the power plant.*

Mr. Tettis then showed us the pump station and oil water separator that pumps process water to outfall 213/013. Mr. Tettis stated that the oil water separator house is equipped with an oil alarm that is triggered when oil is detected in the discharge pipe from the oil water separator house. When the alarm sounds, the pump must be shut off manually to prevent discharges to outfall 213/013. According to Mr. Tettis, the alarm was noticed at 7:00 AM, and the pump was shut down at 7:30 AM. It is unknown how long the alarm had been sounding prior to it being discovered. Pepco was also unable to determine whether the oil discharged from the oil water separator house through the under drain, or through the overflow pipe.

We circled back to the old oil house after seeing the oil water separator house. At this time, we observed absorbent pads and evidence of a large oil release approximately 30 – 40 feet from the old oil house and power generating plant. There was an approximately 12" white pipe the lead from the power generating plant to a storm grate outside of the plant. There was an oiled absorbent boom surrounding the storm grate, and an approximately 20 foot path of oil staining on the ground outside of the oiled absorbent boom. I asked Mr. Tettis where the pipe originated. Mr. Tettis stated that the pipe is connected to a sump pump in the power generating plant basement (Figure 3).

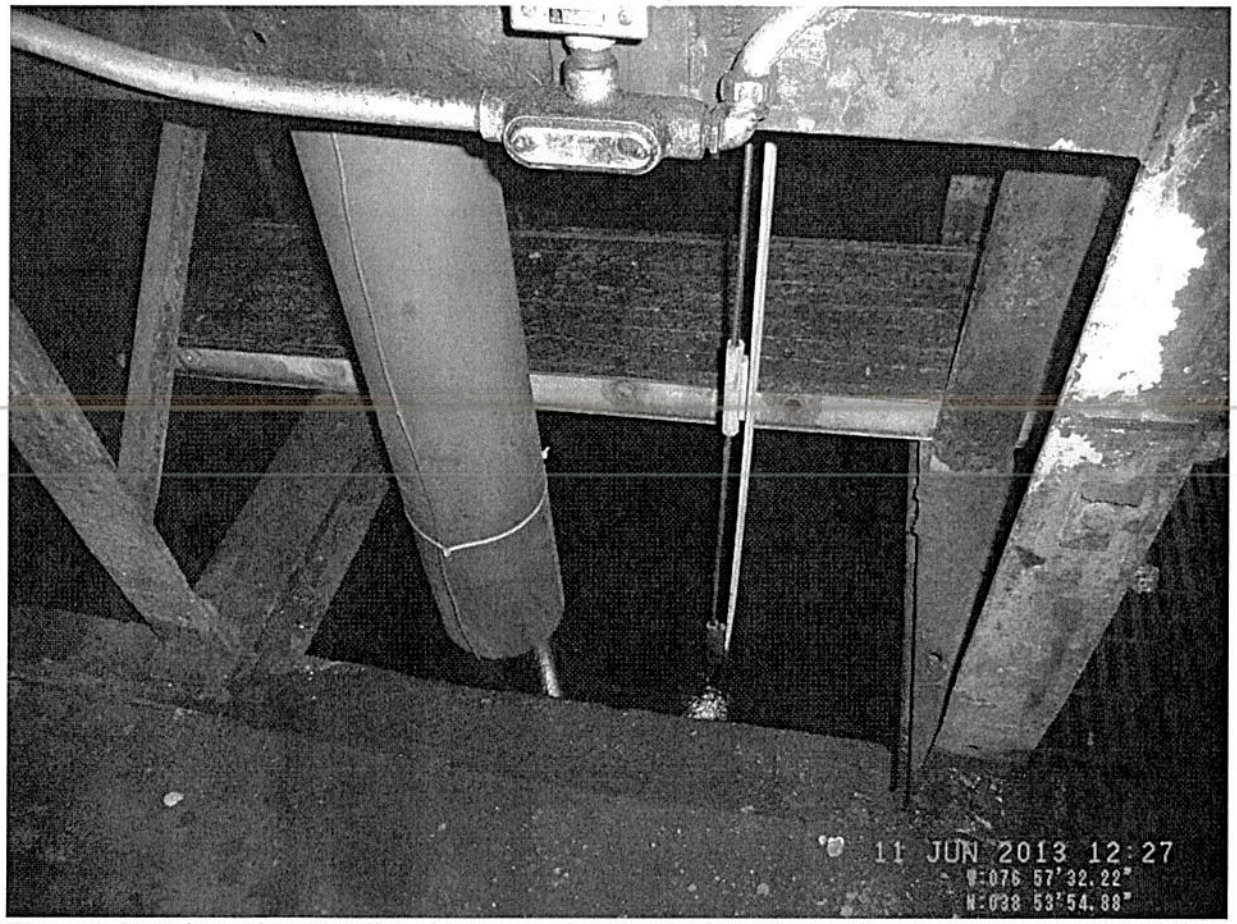


Figure 4 *Sump located in ash cellar of the power plant that discharged oil to the Pepco stormwater system. Oil can be seen accumulated on equipment within the sump, and a thickness of oil was evident in the sump itself.*

Mr. Tettis led us to the sump in the generating plant basement that is connected to the white 12" pipe that discharges to the storm sewer and oil water separator house. The sump is connected to

trench drains running throughout the facility basement. The sump, and equipment within, was heavily oiled (figure 4). There was a strong petroleum odor in the basement, and evidence of a large petroleum release to the basement area. We observed oil in the trench drains in the basement, and oil slicks radiating several feet from each drainage trench (figure 5). Mr. Tettis was unable to provide an explanation of where the oil originated, and how the oil entered into the basement.

We left the site at approximately 1:00 PM. Mr. Emminizer and I returned at 3:00 PM to reevaluate the cleanup efforts at outfall 213/013. When we arrived, the majority of oily product visible in front of outfall 213/013 had been absorbed and A2Z was in the process of cleaning up for the evening. A large containment boom had been placed around the entire area, and the outfall itself had been boomed off. There were also several absorbent pads at differing intervals on the surface of the water. No sheen was observed leaving the boomed area. Mr. Tettis informed us that at this point A2Z had used approximately 2 bales of absorbent sheets during the cleanup.

Figure 5 *Photograph of the power plant ash cellar trench drains taken after the evidence of oil was found in the ash cellar sump. Heavy oil slicks are visible around the trench drains on the floor. The trench drains also contained significant volumes of oil.*

At this time, a field directive was issued to Mr. Mike Williams and signed for by Mr. Tettis directing Pepco Energy Services to immediately cease removal of oily material from the pepco

power plant basement, and have water samples collected from outfall 213/013 and the sump in the power plant basement by June 12, 2013.

Figure 6 *Photograph taken in front of outfall 213/013. Oil staining is visible on vegetation in front of the outfall. The plants appear to have a smear of oil approximately 18" in height.*

June 12, 2013

I arrived onsite with David Pilat and Ibrahim Famuditimi of the Water Quality Division at 10:30 AM. Ms. Heather Brinkerhoff and Mr. Tettis met us at the gate, and showed us to outfall 213/013. Microbac was contracted to take water samples from the river in front of the permitted outfall 213/013, and in the sump pump where the oil appears to have been released to the oil water separator from, for Oil and Grease, TPH-DRO and GRO, PAHs, PCBs, VOCs, and SVOCs. A water sample was collected approximately 5 feet in front of outfall 213/013 of the most heavily impacted waters available for sampling. All sample jars contained a layer of oily product on top of the sample.

Ms. Brinkerhoff and Mr. Tettis then led us to the power generating plant sump area. The floor drains in the old oil house were grouted shut when we arrived. According to Mr. Tettis, the power generating plant basement had been cleaned prior to receiving the directive from DDOE. A2Z was in the process of removing oily material from the trench drains when we arrived, and absorbent had been spread across the floor of the building. A water sample was taken from the sump using a sampling pole and clamp. The water in the sump had a heavy layer of petroleum contamination floating on the surface, and all sample jars appeared to be impacted by oily product.

Figure 7 *Sample taken on June 12, 2013 in front of outfall 213/013*

I asked Mr. Tettis and Ms. Brinkerhoff if any new information had been discovered regarding the source of the oil. Ms. Brinkerhoff stated that Pepco Energy Services believes that a contractor may have made a mistake while decommissioning the plant, and forgotten to drain the oil from a pipeline prior to cutting into the pipeline, but stated that Pepco Energy Services is unsure of the exact source of the oil at this point in time.

Figure 8 *Photograph of the sump in the ash cellar of the power plant taken prior to sampling on June 12, 2013. Evidence of oil impacted equipment, and oil in the sump itself is visible.*

Figure 9 *Trench drain leading to the sump shown in figure 8 shown on June 12, 2013. The trench drain appears to contain oil from the June 11, 2013 release.*

Conclusion:

At several points during the investigation I asked Mr. Tettis where the oil came from, and how the oil was released. During the course of the investigation, neither Mr. Tettis, nor Ms. Brinkerhoff was able to describe the cause or source of the oil release. At this time, the source of the oil, cause of release, and the extent of the damages remain unknown.

Pepco Energy Services reported a release of 10 gallons. According to the National Oceanic and Atmospheric Administration (NOAA) web site, between the suspected time of discharge and the time I made my initial observations the region received approximately 2.77-inches of rainfall and the subject portion of the Anacostia had been through two tide cycles.

Based upon the volume of oil in the power plant basement, the power plant basement trench drains, and the power plant basement sump, as well as evidence around the power plant basement sump discharge pipe and associated stormwater grate, and the oil water separator house and outfall 213/013, coupled with the evidence of oiled plants around outfall 213/013 and the fact that the amount of time oil was discharged from the facility is unknown, raises the potential that a large volume of oil was released from outfall 213/013 to the Anacostia River.

Recommendation:
Outfall 213/013 for 3400 Benning Rd., NE is a permitted outfall under the individual NPDES permit for Pepco at that address. This incident has been submitted to the US EPA Region III headquarters for investigation. The amount of oil seen in the vicinity of outfall 213/013 and the evidence of oil staining on all vegetation in the area indicate that the river sediments, and other biota may have been potentially harmed by this oil release. It is suggested that DDOE consider implementing the Natural Resource Damage Assessment process to assess the environmental damages resultant of this release.